1.2.1. Report of Add-On Courses

(2022 – 23)

Horticulture

Department of Botany

2022 – 23

MAHATMA GANDHI COLLEGE

THIRUVANANTHAPURAM

POST GRADUATE DEPARTMENT OF BOTANY & RESEARCH CENTER

<u>NOTICE</u>

ADD-ON COURSE – HORTICULTURE

Dear students,

We are excited to announce the introduction of an Add-On course titled "Horticulture" for the academic year 2022-2023. This course aims to provide students with an in-depth understanding of Horticulture techniques and their practical applications.

Details of the Add-On Course:

Course Duration: 3 months

Start Date: 03/08/2022

End Date: 30/10/2022

Time: 0 hr

Venue: Room 55

Registration Details

Last Date for Registration: 25/07/2022

Seats are limited, and admission to the course will be on a first-come, first-served basis. Interested students are encouraged to register at the earliest to secure their spot.

For any queries or additional information, please contact the course coordinator, Head, Department of Botany at the department office between 10:00 AM to 4:00 PM on weekdays.

Warm regards,

Head, Department of Botany

Principal
Mahatma Gandhi College
Thiruvananthapuram

MAHATMA GANDHI COLLEGE
THIRUVANANTHAPURAM

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ADD ON COURSE- HORTICULTURE

COURSE STRUCTURE AND SYLLABUS

BY

POST GRADUATE DEPARTMENT &

RESEARCH CENTRE OF BOTANY

(2022 onwards)

OBJECTIVES OF THE COURSE

➢ The candidate is trained on professional skill, professional knowledge and Employability skill related to jobs in Horticulture.

➢ To create awareness about different propagation methods for plants, fundamentals of horticulture, importance and scope of horticulture, classification of horticultural plants and its economic aspects.

➢ The candidates learns about importance of fruits, flowers and vegetables, present situation and scope of development of horticultural crops, schemes on horticultural development, layout of plots and gardens, planning for home gardens, landscape gardens, experimental designs, fruit culture, vegetable propagation, cultivation of fruits & vegetables and flower arrangement.

➢ In addition a candidate is entrusted to undertake project works, extracurricular activities and on job training to build up confidence.

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EXPECTED OUTCOME OF THE COURSE

➢ **Crop Production:** Understanding horticultural techniques allows for the efficient production of a wide range of crops, including fruits, vegetables, ornamental plants, herbs, and medicinal plants.

➢ **Plant Breeding:** Horticulture techniques involve the study of plant breeding to develop new cultivars with improved traits.

➢ **Sustainable Agriculture:** Horticulture techniques play a crucial role in promoting sustainable agriculture practices including studying organic farming methodsand integrated farming systems.

➢ **Nursery Management:** Horticulture techniques encompass the management of plant nurseries, which involves propagation, production, and marketing of plants. This includes studying nursery design, plant propagation techniques, container production, pest and disease management in nurseries, and marketing strategies for selling horticultural products.

➢ **Post-Harvest Technology:** Studying horticulture techniques also covers post-harvest handling, processing, and preservation of horticultural crops and value addition to extend the shelf life, maintain quality, and reduce post-harvest losses.

➢ **Entrepreneurship and Business:** Studying horticulture techniques provides the knowledge and skills required for entrepreneurship in the horticulture industry. This includes understanding market trends, business planning, financial management, marketing strategies, and value chain analysis for horticultural products.

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COURSE STRUCTURE

DURATION : **30 Hrs**

ASSESSMENT & CERTIFICATION : The trainee will be tested for his skill, knowledge and attitude during the period of training and at the end of the training programme including practical examinations.

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HORTICULTURE

SYLLABUS

MODULE I   (10 hrs)

- Scope and importance of horticulture, Divisions of horticulture
- Soil preparation, Potting mixture and potting media, Types of pots and containers
- Garden tools and implements
- Manures and fertilizers - Time and application of manures and fertilizers. Weedicides, Fungicides, Pesticides
- Growth regulators in horticulture - Rooting hormones, Growth promoters, Flower induction.

MODULE- II   (15 hrs)

- Propagation methods
  - Cuttings- root, stem, leaf
  - Layering – Air layering, Ground layering (Tip, Trench and Compound)
  - Budding – T-budding
  - Grafting – Approach grafting, Bridge grafting, whip and tongue grafting
- Bonsai
- Lawns and landscaping

MODULE- III   (5 hrs)

- Flower Arrangement
  - Containers and requirements for flower arrangements Free style, Shallow and Mass arrangement
  - Ikebana
  - Bouquet and garland making
  - Dry flower arrangement
  - Harvesting and Storage methods of flowers

- **Field Study and workshops : Visit to a Botanical garden of horticultural importance**

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ADDONCOURSE –2022- 2023

LISTOFSTUDENTS-HORTICULTURE

SL.NO	NAMEOFSTUDENT	CLASS/SEMESTER
1	SREEKUTTY R	II PG
2	SREELEKSHMI P S	II PG
3	VRINDHA VISWAM	II PG
4	APARNA M S	I PG
5	ARYA S S	I PG
6	AYANA A S	I PG
7	AMAL DEV S	III UG
8	ANJANA M S	III UG
9	ANJITHA PRASAD L	III UG
10	APARNA B	III UG
11	GOPIKA S	III UG
12	NANDHANA S	III UG
13	SANDEEP S	III UG
14	CHANDHANA V S	III UG
15	KRISHNENDHU A P	III UG
16	M PRAVEENA PRATHAPAN	III UG
17	SANDRA U SAJAN	III UG
18	VIJITHA S U	III UG
19	AMAL KRISHNA M	III UG
20	ANJALI B S	III UG
21	AKASH V	III UG
22	SANDESHJS	II UG
23	SANDRASNAIR	II UG
24	SANYAA S	II UG
25	SREELEKSHMIVS	II UG
26	SWETHASABU	II UG
27	ABINS	II UG
28	AKHILKRISHNAAS	II UG

29	ATHULYAKRISHNA.S	II UG
30	AVANTHIKA.M.R	II UG
31	DEVIKARAJANAT	II UG
32	FEBAKU	II UG
33	GOURIKRISHNA.S.B	II UG
34	HAFISRAHMANN	II UG
35	KIRANM	II UG
36	AADHIYA K V	II UG
37	ABHILASHV	I UG
38	ABHINAVSS	I UG
39	ADITHYASNAIR	I UG
40	ADITHYANAV	I UG
41	ADITHYANKM	I UG
42	ARATHYA	I UG
43	ARJUNVS	I UG
44	GAYATHRYS.G	I UG
45	KAVYATR	I UG
46	LEKSHMIJAYAN	I UG
47	MOHAMMADFAIZALF	I UG
48	NANDHUAR	I UG
49	NANDUNB	I UG
50	NIKHILS	I UG

HEADOFTHE DEPARTMENT   PRINCIPAL

Principal
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POST GRADUATE DEPARTMENT & RESEARCH CENTRE OF BOTANY

ADD ON COURSE- HORTICULTURE

QUESTION PAPER

2022-2023 Academic year

Duration: 1 hr   Marks: 30

PART A - (Answer any 5; 1 marks each = 5 marks)

1. Define horticulture.
2. Name one division of horticulture.
3. What is the primary purpose of a potting mixture?
4. Mention a common garden tool.
5. What is a rooting hormone?
6. What is Ikebana?

PART B - (Answer any 5; 2 marks each = 10 marks)

7. Discuss in detail the types of manures and fertilizers, focusing on their application times and impacts on plant growth.
8. Explain the different propagation methods in horticulture, including stem, root, and leaf cuttings.
9. Describe the art and science of Bonsai, highlighting its importance in horticulture.
10. Delve into the concepts of lawns and landscaping, emphasizing their aesthetic and ecological values.
11. Explain the various types of flower arrangements, focusing on the principles and techniques of Ikebana.
12. Discuss the importance of harvesting and storage methods of flowers in maintaining their freshness and prolonging their lifespan.
13. Explain the importance of soil preparation in horticulture.

PART C - (Answer any 3; 5 marks each = 15 marks)

14. Elaborate on the various types of pots and containers used in horticulture and their significance.
15. Discuss in detail the types of manures and fertilizers, focusing on their application times and impacts on plant growth.
16. Explain the different propagation methods in horticulture, including stem, root, and leaf cuttings.
17. Describe the art and science of Bonsai, highlighting its importance in horticulture.
18. Explain the various types of flower arrangements, focusing on the principles and techniques of Ikebana.

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POST GRADUATE DEPARTMENT AND RESEARCH CENTRE OF BOTANY

THIRUVNANTHAPURAM

ADD ON COURSE – 2022 - 2023

MARK LIST OF STUDENTS - HORTICULTURE

SL.NO	NAME OF STUDENT	CLASS/ SEMESTER	MARK	SIGNATURE
1	SREEKUTTY R	II PG	22	
2	SREELEKSHMI P S	II PG	23	
3	VRINDHA VISWAM	II PG	08	
4	APARNA M S	I PG	24	
5	ARYA S S	I PG	22	
6	AYANA A S	I PG	28	
7	AMAL DEV S	III UG	21	
8	ANJANA M S	III UG	22	
9	ANJITHA PRASAD L	III UG	19	
10	APARNA B	III UG	20	
11	GOPIKA S	III UG	28	
12	NANDHANA S	III UG	26	
13	SANDEEP S	III UG	08	
14	CHANDHANA V S	III UG	16	
15	KRISHNENDHU A P	III UG	21	
16	M PRAVEENA PRATHAPAN	III UG	24	
17	SANDRA U SAJAN	III UG	26	
18	VIJITHA S U	III UG	19	
19	AMAL KRISHNA M	III UG	04	
20	ANJALI B S	III UG	28	
21	AKASH V	III UG	22	
22	SANDESH JS	II UG	24	
23	SANDRA S NAIR	II UG	26	
24	SANYA A S	II UG	29	
25	SREELEKSHMI V S	II UG	21	
26	SWETHA SABU	II UG	20	
27	ABIN S	II UG	06	
28	AKHIL KRISHNA A S	II UG	21	

29	ATHULYA KRISHNA.S	II UG	26	
30	AVANTHIKA.M.R	II UG	24	
31	DEVIKA RAJAN A T	II UG	28	
32	FEBA K U	II UG	20	
33	GOURI KRISHNA . S . B	II UG	21	
34	HAFIS RAHMAN N	II UG	05	
35	KIRAN M	II UG	23	
36	AADHYA K V	II UG	26	
37	ABHILASH V	I UG	28	
38	ABHINAV SS	I UG	16	
39	ADITHYA S NAIR	I UG	08	
40	ADITHYAN A V	I UG	24	
41	ADITHYAN K M	I UG	28	
42	ARATHY A	I UG	26	
43	ARJUN V S	I UG	22	
44	GAYATHRY S.G	I UG	24	
45	KAVYA T R	I UG	26	
46	LEKSHMI JAYAN	I UG	28	
47	MOHAMMAD FAIZAL F	I UG	29	
48	NANDHU A R	I UG	28	
49	NANDU N B	I UG	22	
50	NIKHIL. S	I UG	06	

HEAD OF THE DEPARTMENT   PRINCIPAL

Principal
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Report on the Add-on Course in Horticulture

Academic Year: 2022-2023

With an objective to enhance the academic experience of students through specialized sessions, the Department of Botany organized a course for the academic year 2022-2023. . This program was developed not only to educate but also to instil a scientific temperament among students and nurture a sense of social responsibility. Furthermore, this course is a testament to our commitment to ensuring that our students receive a comprehensive education. Structured as a 30-hour course, the content was curated for Post Graduate and Undergraduate students. The course was adeptly leaded by Dr. Praveenkumar BS, Assistant Professor, Department of Botany, NSS College, Cherthala, Alappuzha, an expert in the field of Botany. With a plethora of experience under his belt, Dr. Praveenkumar's guidance was invaluable to the program's success. He was ably supported by a cadre of faculty members, each contributing their distinct expertise to the course modules.

Students greatly benefited from Dr. Praveenkumar's expertise, which was evident from the proactive participation in discussions and the quality of assignments submitted. His approachable demeanor encouraged students to clarify doubts, making the learning process more effective. Post-course feedback highlighted Dr. Praveenkumar's command over the subject and his ability to elucidate complex topics with ease. Students expressed gratitude for the insights they gained, with many considering pursuing advanced studies in the subject. After the course concluded, an examination took place, and 43 students out of the 50 who participated passed the exam. The department extends its heartfelt gratitude to Dr. Praveenkumar BS for his stellar contribution to this course and looks forward to future collaborations.

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Mushroom Cultivation

Department of Botany

2022 – 23

MAHATMA GANDHI COLLEGE

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POST GRADUATE DEPARTMENT OF BOTANY & RESEARCH CENTER

NOTICE

ADD-ON COURSE –MUSHROOM CULTIVATION

Dear students,

We are excited to announce the introduction of an Add-On course titled "Mushroom Cultivation" for the academic year 2022-2023. This course aims to provide students with an in-depth understanding of mushroom cultivation techniques and their practical applications.

Details of the Add-On Course:

Course Duration: 3 months

Start Date: 01/07/2022

End Date: 15/11/2022

Time: 0 hr

Venue: Room 55

Registration Details

Last Date for Registration: 25/06/2022

Seats are limited, and admission to the course will be on a first-come, first-served basis. Interested students are encouraged to register at the earliest to secure their spot.

For any queries or additional information, please contact the course coordinator, Head, Department of Botany at the department office between 10:00 AM to 4:00 PM on weekdays.

Warm regards,

Head, Department of Botany

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ADD ON COURSE

MUSHROOM CULTIVATION

COURSE STRUCTURE AND SYLLABUS

BY

POST GRADUATE DEPARTMENT &

RESEARCH CENTRE OF BOTANY

(2018 onwards)

OBJECTIVES OF THE COURSE

➢ **Understanding Mushroom Biology:** Studying mushroom cultivation involves gaining a deep understanding of the biology, life cycle, and growth requirements of different mushroom species.

➢ **Cultivating Edible Mushrooms:** One of the main objectives of studying mushroom cultivation is to produce edible mushrooms for consumption and commercial purposes. This involves learning about the specific cultivation techniques, substrate preparation, spawn production, and environmental conditions required for different mushroom species.

➢ **Disease Management:** Studying mushroom cultivation includes researching and developing strategies for the prevention and management of diseases that can affect mushroom crops. This objective focuses on understanding common pathogens, identifying disease-resistant strains, implementing proper sanitation practices, and exploring alternative disease control methods.

➢ **Economic Viability and Market Development:** This objective includes conducting market research, evaluating consumer preferences, analyzing production costs, and exploring value-added product development to support successful commercialization and entrepreneurship in the mushroom industry.

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EXPECTED OUTCOMES OF THE COURSE

➢ **Increased Knowledge and Understanding:** Studying mushroom cultivation leads to a deeper understanding of mushroom biology, cultivation techniques, and the factors influencing mushroom growth and development.

➢ **Improved Cultivation Techniques:** Through research and study, new and improved cultivation techniques can be developed. Improved techniques can result in higher yields, better quality mushrooms, and more efficient production processes.

➢ **Enhanced Disease Management Strategies:** Research on mushroom cultivation helps in identifying and developing effective strategies for disease prevention, early detection, and management.

➢ **Sustainable Cultivation Practices:** Studying mushroom cultivation promotes the development and adoption of sustainable practices. This includes exploring alternative and renewable substrates, implementing recycling and waste management strategies, minimizing the use of synthetic inputs, and reducing the environmental footprint of mushroom cultivation.

➢ Increased Commercial Viability: By improving cultivation techniques, optimizing production processes, and developing marketable products, the profitability and competitiveness of mushroom farming can be enhanced. This benefits farmers, entrepreneurs, and the overall mushroom industry.

➢ Training and Education Opportunities: Studying mushroom cultivation creates opportunities for training programs, workshops, and educational resources.

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COURSE STRUCTURE

DURATION   :   **30 Hrs**

ASSESSMENT & CERTIFICATION   : The trainee will be tested for his skill, knowledge

and attitude during the period of training and at the end of the training programme including

practical examinations.

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MUSHROOM CULTIVATION

SYLLABUS

(Total 30 hrs)

MODULE-I   (10 hrs)

➤ History and introduction of Edible and Poisonous mushrooms.

➤ Common Indian mushrooms.

➤ Systematic position,morphology,distribution,structure of Agaricus and Pleurotus.

MODULE- II   (5 hrs)

➤ Nutritional value, medicinal value and advantages- types- milky, straw, button and poisonous mushrooms

➤ Production level, economic return, Foreign exchange from Mushroom cultivating countries and international trade.

MODULE- III   (10 hrs)

➤ Cultivation of Paddy straw mushroom, Oyster mushroom, white button mushroom and milky mushrooms

➤ Spawn making, Substrate preparation, Maintenance and Harvesting

➤ Composting

MODULE- IV   (5 hrs)

➤ Diseases- Common pests, disease prevention and control measures- *Agaricus, Pleurotus* and *Volverilla.*

➤ Processing and storage of mushrooms

Field Study: Visit to a mushroom cultivating Laboratory and handson training for processing.

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POST GRADUATE DEPARTMENT AND RESEARCH CENTRE OF BOTANY

MAHATMA GANDHI COLLEGE

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ADD ON COURSE- MUSHROOM CULTIVATION

LIST OF STUDENTS- 2022-2023

SL.NO	NAME OF STUDENT	CLASS/ SEMESTER
1	AKHILA A G	II PG
2	JOSHNA J BOSCO	II PG
3	SANIKA SURESH	II PG
4	ABHIRAMI S KUMAR	I PG
5	DEVIKA G NAIR	I PG
6	SIMI M S	I PG
7	ABHISHEK RAJESH	III UG
8	AKASH V	III UG
9	ANNE MARY B	III UG
10	ATHMAJ.S.KUMAR	III UG
11	GOWRI L. AJI	III UG
12	SARANYA. V.S	III UG
13	SHILPA S .ANIL	III UG
14	SANDEEP S	III UG
15	ANJITHA PRASAD.S.L	III UG
16	APARNA .A	III UG
17	CHANDHANA N S	III UG
18	SANDEEP S	III UG
19	SANDRA U SAJAN	III UG
20	MOSES MATHEW	III UG
21	SAILEKSHMI. V.S	III UG
22	AKSHAY N P	II UG
23	AKSHAYA. A. M	II UG
24	AMAL A	II UG
25	AVANI.V.T	II UG
26	DEVI PRAKASH	II UG
27	DEVIKA D	II UG
28	DHANUSH.I.S	II UG
29	SANDESH JS	II UG

30	SANDRA S NAIR	II UG
31	AKHIL KRISHNA A S	II UG
32	ATHULYA KRISHNA.S	II UG
33	AVANTHIKA.M.R	II UG
34	DEVIKA RAJAN A T	II UG
35	FEBA K U	II UG
36	RIYA B SUDHARSANAN	II UG
37	ANAKHA A	I UG
38	ARCHA. M. S	I UG
39	NANDANA S S	I UG
40	REVATHY.S	I UG
41	ABHINAV SS	I UG
42	ADITHYA S NAIR	I UG
43	ARJUN V S	I UG
44	KAVYA T R	I UG
45	LEKSHMI JAYAN	I UG
46	MOHAMMAD FAIZAL F	I UG
47	NIKHIL S	I UG
48	SIVADATH U	I UG
49	YAZIN SURYAN	I UG
50	NIHAL R MUHAMMED	I UG

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POST GRADUATE DEPARTMENT & RESEARCH CENTRE OF BOTANY

ADD ON COURSE- MUSHROOM CULTIVATION

QUESTION PAPER

2022-2023 Academic year

Duration: 1 hr   Marks: 30

PART A - (Answer any 5; 2 marks each = 10 marks)

1. Briefly discuss the historical significance of mushrooms.

2. Define the term "morphology" in relation to mushrooms.

3. Explain the medicinal value of mushrooms.

4. Describe the process of composting in mushroom cultivation.

5. Why is disease prevention important in mushroom cultivation?

6. Mention two common pests found in mushroom cultivation.

7. Explain the significance of mushroom storage.

PART B - (Answer any 3; 10 marks each = 30 marks)

8. Discuss the nutritional and medicinal benefits of mushrooms and their economic impact on a global scale.

9. Outline the cultivation process of the Oyster mushroom.

10. Explain the process of spawn making, its importance, and the challenges faced.

11. Describe the common diseases found in Pleurotus and the control measures adopted.

12. Highlight the international trade aspects and foreign exchange implications of mushroom cultivation.

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POST GRADUATE DEPARTMENT AND RESEARCH CENTRE OF BOTANY

MAHATMA GANDHI COLLEGE

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ADD ON COURSE- MUSHROOM CULTIVATION

MARK LIST OF STUDENTS- 2022-2023

SL.NO	NAME OF STUDENT	CLASS/ SEMESTER	MARK	SIGNATURE
1	AKHILA A G	II PG	19	
2	JOSHNA J BOSCO	II PG	20	
3	SANIKA SURESH	II PG	21	
4	ABHIRAMI S KUMAR	I PG	23	
5	DEVIKA G NAIR	I PG	24	
6	SIMI M S	I PG	25	
7	ABHISHEK RAJESH	III UG	22	
8	AKASH V	III UG	23	
9	ANNE MARY B	III UG	08	
10	ATHMAJ.S.KUMAR	III UG	23	
11	GOWRI L. AJI	III UG	22	
12	SARANYA. V.S	III UG	24	
13	SHILPA S .ANIL	III UG	26	
14	SANDEEP S	III UG	28	
15	ANJITHA PRASAD.S.L	III UG	21	
16	APARNA .A	III UG	20	
17	CHANDHANA N S	III UG	06	
18	SANDEEP S	III UG	19	
19	SANDRA U SAJAN	III UG	20	
20	MOSES MATHEW	III UG	22	
21	SAILEKSHMI. V.S	III UG	08	
22	AKSHAY N P	II UG	24	
23	AKSHAYA. A. M	II UG	25	
24	AMAL A	II UG	20	
25	AVANI.V.T	II UG	22	
26	DEVI PRAKASH	II UG	21	
27	DEVIKA D	II UG	22	
28	DHANUSH.I.S	II UG	24	
29	SANDESH JS	II UG	20	

29	SANDESH JS	II UG	24	
30	SANDRA S NAIR	II UG	26	
31	AKHIL KRISHNA A S	II UG	07	
32	ATHULYA KRISHNA.S	II UG	20	
33	AVANTHIKA.M.R	II UG	05	
34	DEVIKA RAJAN A T	II UG	24	
35	FEBA K U	II UG	28	
36	RIYA B SUDHARSANAN	II UG	18	
37	ANAKHA A	I UG	07	
38	ARCHA. M. S	I UG	15	
39	NANDANA S S	I UG	19	
40	REVATHY.S	I UG	23	
41	ABHINAV SS	I UG	27	
42	ADITHYA S NAIR	I UG	08	
43	ARJUN V S	I UG	16	
44	KAVYA T R	I UG	14	
45	LEKSHMI JAYAN	I UG	22	
46	MOHAMMAD FAIZAL F	I UG	07	
47	NIKHIL S	I UG	28	
48	SIVADATH U	I UG	26	
49	YAZIN SURYAN	I UG	08	
50	NIHAL R MUHAMMED	I UG	22	

HEAD OF THE DEPARTMENT   **PRINCIPAL**

Report on the Add-on Course – Mushroom Cultivation

Academic Year: 2022-2023

In an effort to seamlessly weave conventional classroom learning with hands-on practical exposure, the Department of Botany has introduced an avant-garde add-on course centered around mushroom cultivation. This program is not merely an academic enterprise; it's a well-thought-out initiative aimed at igniting scientific enthusiasm and instilling a deep sense of societal contribution among our scholars. Such an initiative amplifies our unwavering dedication to a holistic educational approach. This 30-hour course, fashioned to cater to both Undergraduate and Post Graduate audiences, was expertly steered by Dr. Bosco Lawarence, Professor & Head at Gov. College for Women, TVM. His in-depth sessions, delivered with precision and clarity, were enriched by invaluable contributions from various faculty members, ensuring that students gained a comprehensive understanding of the subject. The initial session, presided over by Dr. Bosco Lawarence, dove deep into the mesmerizing world of mushroom cultivation. The eagerness and active engagement displayed by the students resonated with the subject's allure and their intrinsic interest. Subsequent lectures provided a granular insight into tissue culture, touching upon essential terminologies, pioneering techniques, and core tools of the trade. Moreover, the expansive applications and overarching significance of tissue culture across a multitude of sectors were elucidated. Maintaining a spirit of interactive learning, students were encouraged to actively participate, with many expressing a palpable interest in harnessing these techniques firsthand. To further solidify their foundational knowledge, periodic review sessions were integrated, ensuring clear understanding and retention of the subject matter. Following the completion of the classes, an examination was administered, with 42 students out of a total of 50 successfully passing the exam.

Upon culmination of the course, students were presented with certificates, recognizing their dedication and successful completion of the course modules. To encapsulate, the introduction of this mushroom cultivation techniques add-on course stands as a testament to the Department of Botany's ethos. It reflects our consistent endeavor to meld theoretical paradigms with tangible application, striving to offer a comprehensive and enriching learning experience to our students.

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Food Chemistry
Department of Chemistry
2022 – 23

MAHATMA GANDHI COLLEGE

THIRUVANANTHAPURAM

POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH CENTER

NOTICE

ADD-ON COURSE –FOOD CHEMISTRY

Department of chemistry is conducting an Add-On course titled "FOOD CHEMISTRY" for the academic year 2022-2023. This course aims to provide students with an in-depth understanding and their practical applications.

Course Duration: 30 hour

Last Date for Registration: 6/09/22

For any queries or additional information, please contact the course coordinator, Head, Department of Chemistry.

Head, Department of Chemistry

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FOOD CHEMISTRY

Unit 1

Chemical composition of food

Major components of food - Carbohydrate, Proteins and Amino Acids, Lipids and Fatty Acids, Minerals, Vitamins, Fibers- General classification with examples, Sources and Functions, Moisture content in food and water activity.

6hours

Unit 2

Food additives

Definition, Characteristics, Classification- based on origin-natural and synthetic, based on technological function-Stabilizers of physical characteristics, Inhibitors of chemical and biological alterations, Modifiers of organoleptic characters, Improvers and correctors, based on types of food additives- Flavouring agents, Enzyme preparations, Other additives including preservatives, colouring agents, Non-sugar sweeteners, Aroma substances, Functional role of food additives, toxicology , safety issues, Examples for flavour enhancers – monosodium glutamate (MSG), maltol and menthol.

12hours

Unit 3

Food analysis

Compositional analysis of foods-moisture and total solid analysis, ash analysis, fat analysis, protein analysis, carbohydrate analysis, vitamin and mineral analysis.

6 hours

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COURSE OUTCOMES

1. Identify additives added to foods for various purposes

2. Acquire knowledge of adulteration and toxicity of food

3. Analysis of food components

Food Chemistry

Model Question Paper

Max.Marks:10

Each question carries 1 mark

1. Give an example for essential amino acid.
2. What are textured protein products?
3. What is MSG?
4. Give an example for a natural food additive.
5. What is Benedict's reagent?
6. What are mycotoxins?
7. When did PFA enacted?
8. What is Pasteurization?
9. Give any two traditional methods of food processing.
10. What are the 3 types of fibre?

(10x1=10 marks)

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	Academic YEAR 2022-2023	
	Food Chemistry	
Sl.No	Name	Candidate Code
1	Akhilchandran	63521118001
2	Anagha B	63521118002
3	Anjali S Kumar	63521118003
4	Anjana A	63521118004
5	Anjitha K.S	63521118005
6	Devika Suresh	63521118006
7	Divya Dileesh	63521118007
8	Geethu G	63521118008
9	Praveena V.P	63521118013
10	Kavya M.K	63521118010
11	Meenakshi .S	63521118011
12	Parvathy Jaysree	63521118012
13	Aiswarya S	63522118001
14	Anjali S Narayan	63522118002
15	Anjana Bayagod	63522118003
16	Anju Kunjumon	63522118004
17	Anupama A.S	63522118005
18	Bhadra C Vikas	63522118006
19	Gangadevi R	63522118007
20	Gokul M	63522118008
21	Gopika S Kumar	63522118009
22	Lipson Raju	63522118010
23	Noufiya N.S	63522118011
24	Akash Vijayan	23522118002
25	Abhinav P.G	23522118012
26	Abhirami J	23522118013
27	Adithya R.S	23522118004
28	Akhil Anil	23522118006
29	Al Ameen M.S	23522118006
30	Al Hafis R.H	23522118007
31	Aleena R.V	23522118008
32	Amal Gopan	23522118009
33	Anarsha A.S	23522118010
34	Gopika S Anju	23522118011
35	Nandana A	23522118012
36	Arjun B.K	23522118013
37	Arjun S.S	23522118014
38	Asna A	23522118015
39	Athrishna	23522118016
40	Dhanalekshmy A	23522118017
41	Gopika S	23522118018
42	Nandana Anand	23522118019
43	Nandana S.A	23522118020
44	Parvathy B	23522118021
45	Pranav R.M	23522118022
46	Sidharth S.B	23522118023
47	Sivalekshmy S.J	23522118024

48	Sreebhadra A	23522118025
49	Ahalya P.S	23522118026
50	Anjana M	23522118027
51	Aleenakrishna	23522118028
52	Athulya A.D	23522118029
53	Goutham R	23522118030
54	Gowri S.B	23522118031
55	Krishnanandu	23522118032
56	Malavika M	23522118033
57	Niranjana T.T	23522118034
58	P.Gangaprabhakar	23522118035
59	Prejith A	23522118036
60	Rahul A.S	23522118037
61	Reshma A	23522118039
62	Sailekshmy B.S	23522118040
63	Surumi S.N	23522118041
64	Swathy R	23522118042
65	Theershan A	23522118043
66	Abhirami A	23522118044
67	Adithya A.G	23522118045
68	Aswin S Kumar	23522118046
69	Arya S.N	23522118047
70	Bijin B	23522118048
71	Devika S.R	23522118049
72	Kiran Rajesh S	23522118050
73	Reslin V.R	23521118851
74	Devanarayanan	23521118852

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SUMMARY REPORT OF ADD-ON COURSE – FOOD CHEMISTRY (2022- 2023)

Considering the importance of food chemistry in the society we started an Add on course on food chemistry and it was successfully completed in the academic year 2022-2023, seventy four students were enrolled for the course. Classes conducted from 06/10/2022 to 20/03/2023 for 30 hours. Here we concentrated on the theory part.

After the completion of the course, students were assessed by written examination. Those who secured 60% marks and above in written examinations were honoured by certificates.

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ouY	2352118034	10
1	2252118035	9
V .	2352118036	10
.	235211118037	9
kA	93521118038	8
	23521118039	7
. S .	93521118040	7
P .	23521118041	8
oy R.	2352118042	9
R	2352118043	10
3	2352118044	10
	2352118045	9
S.P	2352118046	8
.	2352118047	7
rishn A	2352118048	6
	2352118049	7
crishn	2352118050	8
	2352118051	9
rishnan	2352118052	10
n.S.	2352118053	10
v.S	2352118054	10
u.B.G.	2352118055	10

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na Gandhi College
ruvananthapuram

2022 – 2023   I

Food chemistry

	Name	candidatecode	Marks.
1.	Akhil chandhan	63521118001	10
2.	Anagha B	63521118002	10
3	Anjali S kumar	63521118003	9
4	Anjana A .	63521118004	10
5	Anjitha K.S	63521118005	8
6.	Devika Suresh	63521118006	7
7	Divya Dilesh	63521118007	6
8	Geethu G	63521118008	6
9	Praveena V P	63521118013	9
10	Kavya M.K	63521118010	10
11	Meenakshi S	63521118011	8
12	Parvathy Jaysree	63521118012	7
13	Aiswarya S.	63522118001	6
14.	Anjaly S Narayan.	63522118002	8
15	Anjana Bayagodi	63522118003	9
16	Anju kunjumon	63522118004	10
17	Anupama A S	63522118065	9
18	Bhadra C Vikas	63522118006	8
19	Gangadevi R	63522118007	7
20	Gokul M	63522118008	6
21	Gopika S kumar	63522118009	9
22	Lipson Roy	63522118010	7
23	Noufia N S	63522118011	8
24	Akash Vijayan	23522118062	7
25	Abhinav P G	23522118012	6
26	Abhirami J	23522118013	6

	Reg. No.	Mark		Name	Reg. No.	Mark
t,s	23520118006	10	61.	Reshma A	23592118039	8
H	23522118007	9	62	gau lekshmi B.S	25522118040	9
V	23522118008	8	63	Sarumi S.N	25522118041	7
an	23522118009	7	64	swathy R	25522118042	6
AS	23522118010	6	65	Theershan A	23522118043	10
nyu	23522118011	10	66	Abhiram A	23522118044	10
na	23522118012	10	67	Adithya A.G	23522118045	10
lc	23522118013	9	68	Aswin S. kumar	25522118046	9
i	23522118014	8	69	Asiya S.N	93522118047	8
	23522118015	7	70	Bifin B	23522118048	8
L	23522118016	8	71	Devika S.R	23522118049	9
mi A	23522118017	8	72	Kiran Rajeshs	23522118050	9
	23522118018	9	73	Reshm V.R	23522118851	10
ʎ	23522118019	9	74	Devanarayana H	23522118852	10
9	23522118020	10				
3	23522118021	10				
H	23522118022	10				
B	23522118023	9				
S	23522118024	9				
A	23522118025	8				
	23522118026	8				
	23522118027	8				
na	23522118028	7				
	23522118029	7				
-	23522118030	8				
	23522118031	7				
L	23522118032	8				
	23522118033	9				
7.π	23522118034	10				
	23522118035	10				
	23522118036	8				
	23522118037	7				

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22 – 2023

our Spectroscopy.

candidates	Marks

Name	Reg. No.	Marks
neesh	23520118001	10
..k	23520118002	9
hnan J	23520118003	9
.H	23520118004	7
M.S	23520118005	8
B	23520118006	7
hnan 4l	23520118007	7
R	23520118008	7
l.s	23520118009	7
.	23520118010	8
ovcir	23520118012	9
	23520118014	9
c	23520118015	10
s	23520118016	10
l.	23520118017	9
krsh	23520118018	8
J	23520118019	7
inul.	23520118020	9
Mohan	23520118021	9
2.	23520118022	8
nanad	23520118024	10
1-S	23520118025	10
J.S	23520118026	10
inod o	23520118027	6
crishnan	23520118028	8
lcu. A.V	23520118029	7
him.	23520118030	9
	23520118031	9
S	23520118032	9
iuresh	23520118033	9
31 Supriya Rani	23520118034	8
32 Umeshdiv U.I.c	23520118035	8
53 Abhijith A.S	23520118036	8
34 Adithya Vinod	23520118037	8
35 Amaldev L	23520118038	8
36 Anandan H.A	23520118039	7
37 AnanthakrishS.	23520118040	7
38 Aneesh s	23520118041	5
39 Aswanth s.R	23520118042	8
40 Gowri M.S	23520118043	9
41 Jishnu Siva s	23520118044	9
42 Lakshmi B	23520118045	6
43 Megha M.S	23520118046	6
44 Priyadersini P.S	23520118047	10
45 R. Chethanya	23520118048	10
46 Vyshnavi A.R	23520118049	10
47 Anuja Ananthele	23520118050	6
48 Bhagya soman u.s	23520118051	7
49 Golkel G.R	23520118052	9
50 Sabarinath K.G	23520118053	10
51 Silpa B.S	23520118054	6
52 Sree lakshu Sund.	23520118055	7
53 Visakh N	23520118056	8
54 Amaljith a.c	23520118057	10
55 Gayathri A.S	23520118058	10

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Molecular Spectroscopy

Department of Chemistry

2022 – 23

MAHATMA GANDHI COLLEGE

THIRUVANANTHAPURAM

POST GRADUATE DEPARTMENT OF CHEMISTRY & RESEARCH CENTER

<u>NOTICE</u>

ADD-ON COURSE –MOLECULAR SPECTROSCOPY

Department of chemistry is conducting an Add-On course titled "MOLECULAR SPECTROSCOPY" for the academic year 2022-2023. This course aims to provide students with an in-depth understanding of spectroscopic techniques and their practical applications.

Course Duration: 30 hour

Last Date for Registration: 08/06/22

For any queries or additional information, please contact the course coordinator, Head, Department of Chemistry.

Head, Department of Chemistry

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Thiruvananthapuram

Add on course Syllabus

Molecular spectroscopy

Unit 1   Introduction   8h

General features of absorption - Beer-Lambert's law and its limitations, transmittance, Absorbance, and molar absorptivity. Single and double beam spectrophotometers. Electronic spectroscopy: Interaction of electromagnetic radiation with molecules and types of molecular spectra. Energy levels of molecular orbitals (σ, π, n). Selection rules for electronic spectra. Types of electronic transitions in molecules effect of conjugation. Concept of chromophore and auxochrome.

UNIT-II Infra red spectroscopy   8h

Different Regions in Infrared radiations. Modes of vibrations in diatomic and polyatomic molecules. Characteristic absorption bands of various functional groups. Interpretation of spectra-Alkanes, Aromatic, Alcohols, carbonyls, and amines with one example to each.

UNIT-III Proton magnetic resonance spectroscopy   8h

Principles of nuclear magnetic resonance, equivalent and non-equivalent protons, position of signals. Chemical shift, NMR splitting of signals - spin-spin coupling, coupling constants. Applications of NMR with suitable examples - ethyl bromide, ethanol, acetaldehyde, 1,1,2-tribromo ethane, ethyl acetate, toluene and acetophenone.

UNIT-IV   6h

Instrument demonstration

UV-Visible spectroscopy, IR spectroscopy, Photoluminescence Spectrometer (PL)

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Course Outcome

- Predict which organic compounds should exhibit visible color based upon extent of conjugation.
- Explain the origin of infrared absorptions in terms of vibrational modes of covalent bonds.
- Predict direction of chemical shifts caused by various structural shielding or deshielding effects.
- Explain the principle and instrumentation of electronic spectroscopy, Infrared spectroscopy, NMR spectroscopy and analyze the spectra of different species.

d) Infrared spectra give information about bonding features and functional groups in molecules.

Sl.No	Name		Candidate Code
	Academic Calendar 2022-2023		
	Molecular Spectroscopy		
1	Abhaya Vineesh		23520118001
2	Abhiram V.K		23520118002
3	Adarsh Krishnan J		23520118003
4	Aiswarya M.S		23520118004
5	Aiswarya B		23520118005
6	Akhilkrishnan		23520118006
7	Anakha S.R		23520118007
8	Anandu A.S		23520118008
9	Adithya K.H		23520118009
10	Anjali P.S		23520118010
11	Aparna S nair		23520118012
12	Arya A.S		23520118014
13	Aswathy C		23520118015
14	Athira B.S		23520118016
15	Athira O		23520118017
16	Bharath S Krishnan		23520118018
17	Devika A.J		23520118019
18	Farhana Sunil		23520118020
19	Goutham Mohan		23520118021
20	Govind P		23520118022
21	Hari S Prasad		23520118024
22	Harsha G.S		23520118025
23	Jayanth J.S		23520118026
24	Krishna Vinod		23520118027
25	Panchami Krishnan		23520118028
26	Parvathy Nair		23520118029
27	Priyadarshini		23520118030
28	Remya P		23520118031
29	Salmiya S		23520118032
30	Soujith Suresh		23520118033
31	Supriya Rani		23520118034
32	Umeshdev U.K		23520118035
33	Abhijith A.S		23520118036
34	Adithya Vinod		23520118037
35	Amaldev L		23520118038
36	Anandan H.A		23520118039
37	Ananthakrishnan S		23520118040
38	Aneesh S		23520118041
39	Aswanth S.R		23520118042
40	Gowri M.S		23520118043
41	Jishnusiva S		23520118044
42	Lakshmy B		23520118045
43	Megha M.S		23520118046
44	Priyadarshini P.S		23520118047
45	R. Chaithanya		23520118048
46	Vaishnai A.R		23520118049
47	Anuja Ananthan		23520118050

48	Bhagyasoman U.S	23520118051
49	Gokul G.R	23520118052
50	Sabarinath K.G	23520118053
51	Silpa B.S	23520118054
52	Sreelekshmy Sunil	23520118055
53	Visakh N	23520118056
54	Amaljith A	23520118057
55	Gayathri A.S	23520118058

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Time: 15 minutes

Marks: 10

1. Absorption of radiation in the UV range attributable to n→π* electronic transitions is characteristic of which of the following types of compounds?

   ☐ a) Aromatic hydrocarbons.

   ☐ b) Unsaturated carbonyl compounds.

   ☐ c) Non-conjugated polyenes.

   ☐ d) Conjugated polyenes.

2. Which is the correct order of increasing wave number of the stretching vibrations of (1) C-H (alkane), (2) C-H (alkene), (3) C-H (alkyne), and (4) C-H (arene)?

   ☐ a) (1) < (2) ≈ (3) < (4)

   ☐ b) (4) < (3) ≈ (2) < (1)

   ☐ c) (3) < (4) ≈ (2) < (1)

   ☐ d) (1) < (4) ≈ (2) < (3)

3. Which of the following statements in the context of ¹H NMR spectroscopy is true?

   ☐ a) Arene C-H chemical shift (δ) values are greater than simple alkenes C-H chemical shift values because of the aromatic ring current.

   ☐ b) Arene C-H chemical shift (δ) values are smaller than simple alkenes C-H chemical shift values because of the aromatic ring current.

   ☐ c) Arene C-H signals are always multiplets.

   ☐ d) Arene C-H signals are always singlets.

4. Which of the following statements is wrong?

   ☐ a) UV absorption is attributable to electronic transitions.

   ☐ b) UV spectra provide information about valence electrons.

   ☐ c) IR absorption is attributable to transitions between rotational energy levels of whole molecules.

   ☐ d) NMR spectrometers use radiofrequency electromagnetic radiation.

5. Which is the correct order of increasing wave number of the stretching vibrations of (1) C-H (alkane), (2) O-H (alcohol), (3) C=O (ketone), and (4) C≡C (alkyne)?

   ☐ a) (4) < (3) < (2) < (1)

☐ b) (3) < (4) < (2) < (1)

☐ c) (3) < (4) < (1) < (2)

☐ d) (4) < (3) < (1) < (2)

6. How many signals does the aldehyde $(CH_3)_3CCH_2CHO$ have in ^1H NMR spectra?

☐ a) five ^1H signals and six ^{13}C signals

☐ b) three ^1H signals and four ^{13}C signals

☐ c) five ^1H signals and four ^{13}C signals

☐ d) three ^1H signals and six ^{13}C signals

7. Which of hydrogens a-d in the following molecule gives a triplet signal in a normal ^1H NMR spectrum?

$$\underset{a}{CH_3}-\overset{\overset{O}{\|}}{C}-\underset{b}{CH_2}\underset{c}{CH}(\underset{d}{OCH_3})_2$$
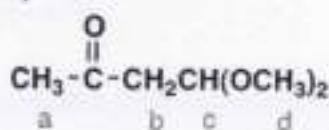
☐ a) hydrogen a

☐ b) hydrogen b

☐ c) hydrogen c

☐ d) hydrogen d

8. Which hydrogen of 1-chloropent-2-ene shows the largest chemical (downfield) shift in its NMR spectrum?

☐ a) the H on C1

☐ b) the H on either C2 or C3

☐ c) the H on C4

☐ d) the H on C5

9. Which carbon of (a)-(d) of hex-3-en-2-one shows the largest (most downfield) chemical shift in the NMR spectrum?

☐ a) C1

☐ b) C2

☐ c) C4

☐ d) C6

10. Which of the following statements regarding IR spectroscopy is wrong?

☐ a) Infrared radiation is higher in energy than UV radiation.

☐ b) Infrared spectra record the transmission of IR radiation.

☐ c) Molecular vibrations are due to periodic motions of atoms in molecules, and include bond stretching, torsional changes, and bond angle changes.

SUMMARY REPORT OF ADD-ON COURSE – MOLECULAR SPECTROSCOPY(2022-2023)

As per the request of several students we started an Add on course on Molecular spectroscopy and it was successfully completed in the academic year 2022-2023, 55 students were enrolled for the course. Classes conducted from 04/07/ 2022 to 08/02/2023 for 30 hours.   Theory and practical sessions were included in this course.

After the completion of the course, students were assessed by written examination. Those who secured 60% marks and above in written examinations were honoured by certificates.

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DashBoard Creation in Excel

Department of Commerce

2022 – 23

PG & RESEARCH DEPARTMENT OF COMMERCE & IQAC

MAHATMA GANDHI COLLEGE, TRIVANDRUM

Add on Course

Dashboard Creation in Excel

March 10th Fri
11:30 A

Joanna Jose Pereira

CCROM Cum Accounting Faculty

In association with

Principal
Mahatma Gandhi College
Thiruvananthapuram

SKILLSPARK
THE FINISHING SCHOOL

Skillspark The Finishing School Pvt. Ltd

Course syllabus

Aim of the Course: To impart knowledge to students have a better understanding of dashboard creation in excel such as planning a dashboard

Course Objectives:

1. To impart knowledge regarding concepts of Advanced Excel
2. To make students capable for Dashboard creation in Excel

Module 1: Introduction to Advanced Excel (3 Hours)

An overview on-screen- navigation- spreadsheet concepts- selection techniques- short keys

Module 2: Using functions (3 Hours)

Using different functions- Sum, average, max, min, count- Absolute, mixed and relative referencing

Module 3: Mathematical Functions (3 Hours)

SumIf, SumIfsCountIfsAverageIfs, Nested If, AND, OR, NOT

Module 4: Test Functions (3 Hours)

Upper, lower- Left, mid, right- Trim- Concatenate- Find, Substitute

Module 5: Date & Time functions (3 Hours)

Today-now- Day-month-year- Date- Weekday

Module 6: Paste special techniques (3 Hours)

Paste formulas- Paste validations-Transpose Tables

Module 7: Sorting & Filtering (3 Hours)

Filtering on text, numbers- Sorting options- Advanced filters

Module 8: Printing workbooks (3 Hours)

Setting up print area- Customization of header and footer- Print titles / Repeat rows & Columns

Module 9: Introduction to Excel Dashboards (3 Hours)

Planning a dashboard, adding tables and charts, and adding dynamic content

Module 10: Advanced Excel Dashboard creation (3 Hours)

Basic charting- Advanced charting- Pivot data in dashboard- Conditional formatting

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Add- on Course on Dashboard Creation in Excel organised by PG & Research Department of Commerce Mahatma Gandhi College in association with Skillspark The Finishing School Pvt. Ltd from march10th 2023 to March 19th 2023

ENROLLMENT LIST

Sl No.	Name	Contact Number	Course
1	JOJOREXON	9072862602	M. Com
2	Anju S	9188364594	B.Com
3	Devika G R	6282520995	B.Com
4	Eminia Johnson	9188804542	B.Com
5	Malavika U S	7994058281	B.Com
6	Chelsy John	9207696824	B.Com
7	Reshma. L. R	7510115875	B.Com
8	Megha S Nair	8111946766	B.Com
9	Ashwin M V	7994098517	B.Com
10	Arsha. P. R	9633014518	B.Com
11	Shahin. S	8547077009	B.Com
12	Anusree A S	9895376089	M.Com
13	Midhun.M	9895809664	B.Com
14	Jisha.s	9567871328	B.Com
15	Nandana.s	8590410398	B.Com
16	Rahul P N	9895599659	M.Com
17	Pranav.S	6238817168	M.Com
18	Abhinand Raj	6282702912	B.Com
19	Jishitha B	9567441168	M.Com
20	PRANAV DD	9048366542	B.Com
21	Jishna VM	9995509499	B.Com
22	Anusree A S	9895376089	B.Com
23	Anu A S	9020115715	M.Com
24	Swathy premkumar	7907821072	M.Com
25	Aiswarya I. S	9074157112	B.Com
26	Megha S Nair	8111946766	M.Com
27	Annya Anilkumar	9207193010	B.Com
28	Swathy premkumar	7907821072	B.Com
29	Ammu O S	7559973130	M.Com
30	Jishitha B	9567441167	M.Com

31	Kaveri S Giri	9497599361	B.Com
32	Jefin Jose	8078409336	M.Com
33	Radhika. R	8848311326	B.Com
34	Parvathy Krishna s s	8078313082	B.Com
35	Devika Sreekumar	9188783294	B.Com
36	Nithyakrishnan	9947512550	B.Com
37	Anupama Madhu	9074260213	B.Com
38	Ajay. M	8301028549	B.Com
39	Niranjan	7012000596	B.Com
40	Arathy v s	8086780071	B.Com
41	Aparna S Prasad	6238154951	B Com
42	Ahalya Krishna	8301944641	M.Com
43	Lakshmi Mohan R	8086631469	B Com
44	Devika Bhadran	7907227428	M.Com
45	Rauf khan	9778477467	B Com
46	Bharath S K	9188491227	B Com
47	Soorya S Nair	9074702325	M.Com
48	Hima V Nair	9544884897	B.Com
49	Greeshma Satheesh	9400782054	B.Com

Principal
Mahatma Gandhi College
Thiruvananthapuram

Photo Gallery
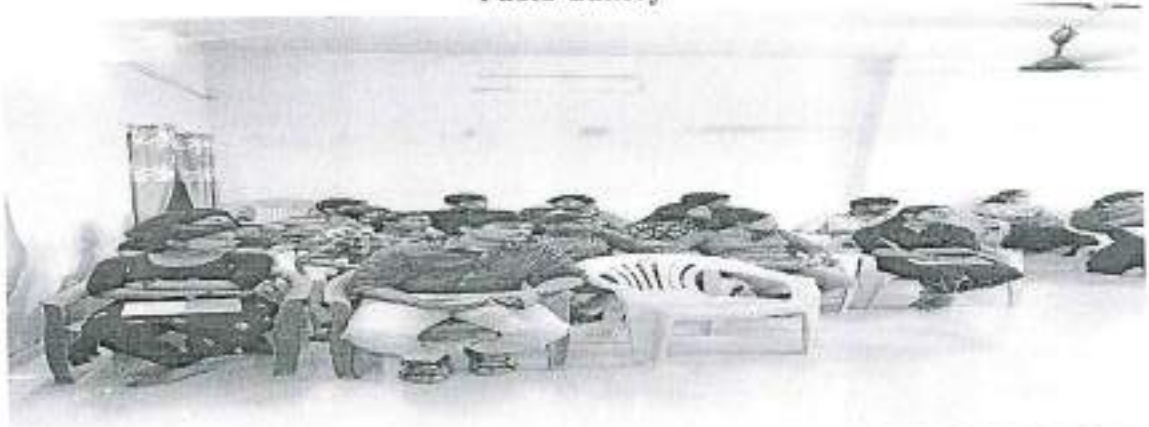
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Kesavadasapuram, Thiruvananthapuram, 695004,
KL, India
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GWJV+R9J, Muttada, Sree Nagar, Kesavadasapuram, Thiruvananthapuram, Kerala 695044, India
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GWJV+MWV, Vyasa Nagar, Sree Nagar, Kesavadasapuram, Thiruvananthapuram, Kerala 695044, India
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Thiruvananthapuram, Kerala, India
GWJV+MWV, Vyasa Nagar, Sree Nagar, Kesavadasapuram,
Thiruvananthapuram, Kerala 695044, India
Lat 8.531028°
Long 76.944117°
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Thiruvananthapuram, Kerala, India
746, Kuravankonam Ambalamukku Rd, Near Ronoy Marbles, Ambalamukku,
Thiruvananthapuram, Kerala 695005, India
Lat 8.52723°
Long 76.955124°
21/03/23 08:54 AM GMT +05:30

Thiruvananthapuram, Kerala, India
746, Kuravankonam Ambalamukku Rd, Near Bonoy Marbles, Ambalamukku,
Thiruvananthapuram, Kerala 695005, India
Lat 8.52723°
Long 76.955124°
21/03/23 09:54 AM GMT +05:30

Thiruvananthapuram, Kerala, India
746, Kuravankonam Ambalamukku Rd, Near Bonoy Marbles, Ambalamukku,
Thiruvananthapuram, Kerala 695005, India
Lat 8.52723°
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Registration

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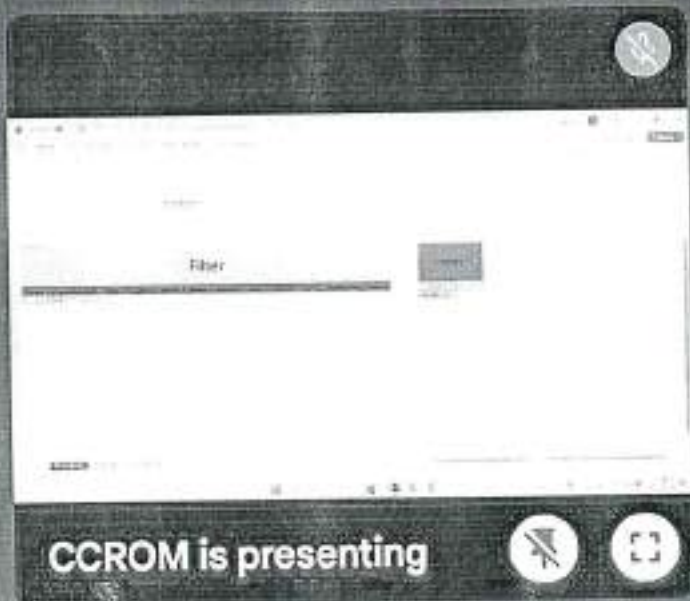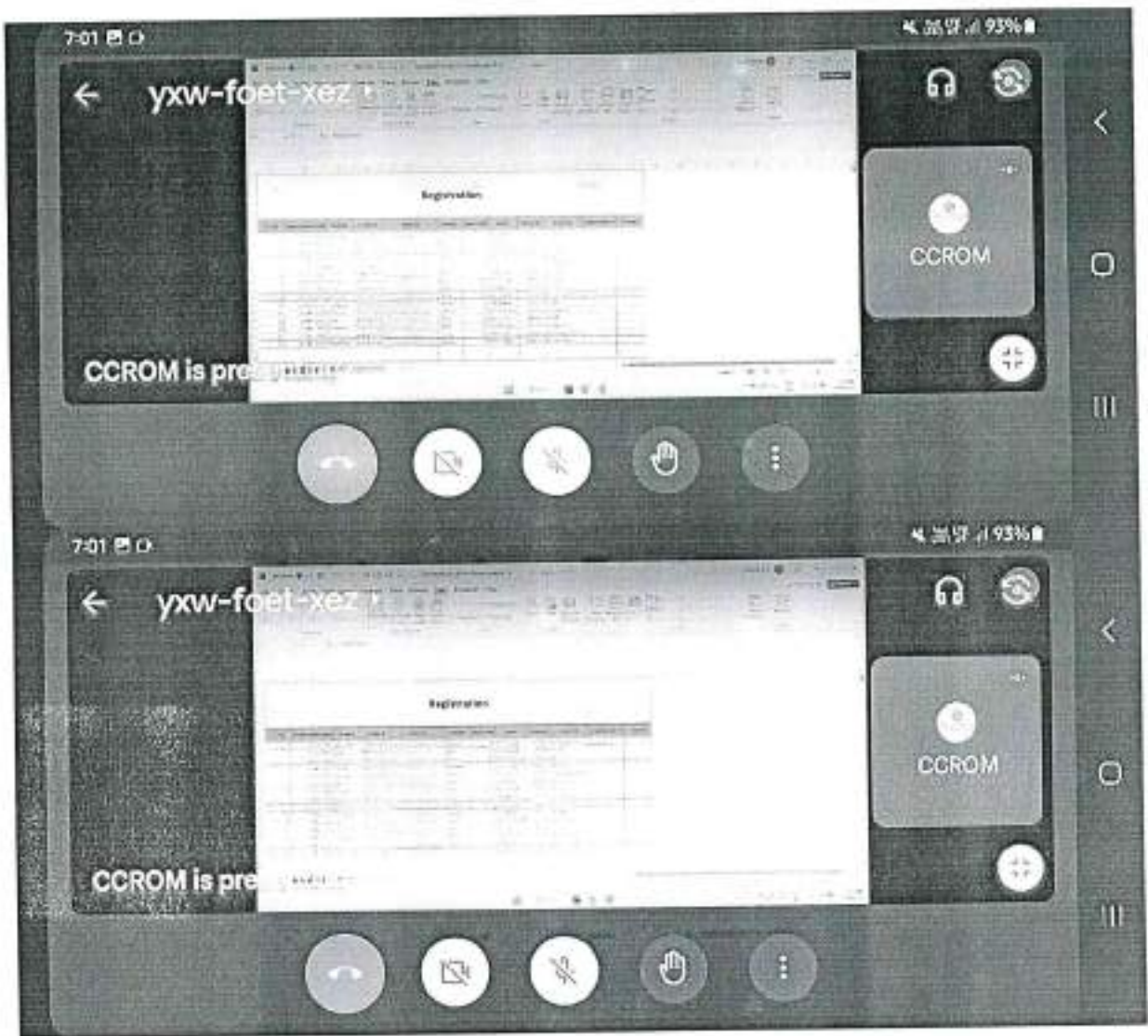
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← **About this call**

| People | Informati... | Activities |

In call

SHAHIN S (You)

CCROM TV...
Meeting host

CCROM TV...
Meeting host

CCROM TV...
Meeting host

14 .Parvath...

31 Annya A...

32.Arathy ...

44Radhika ...

52 Arsha P.R

55 Jishna ...

Aiswarya

Anupama ..
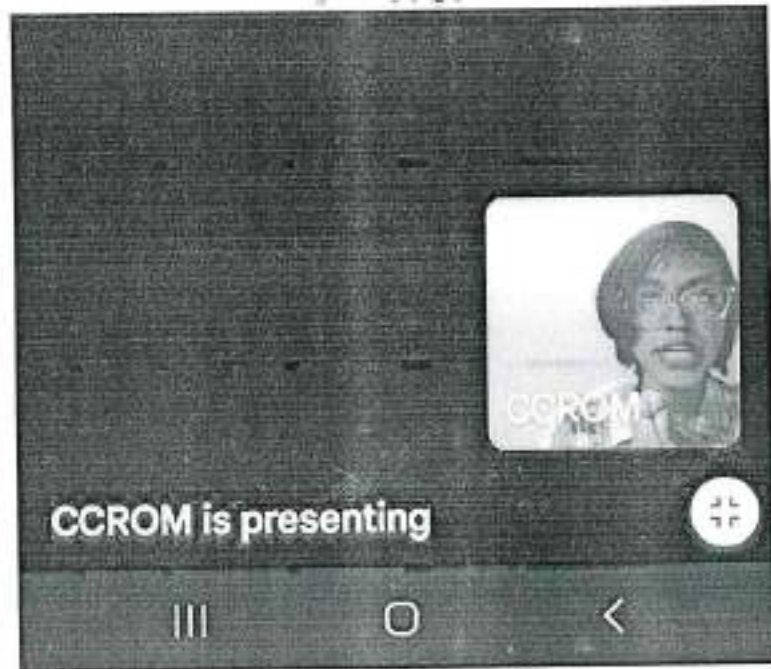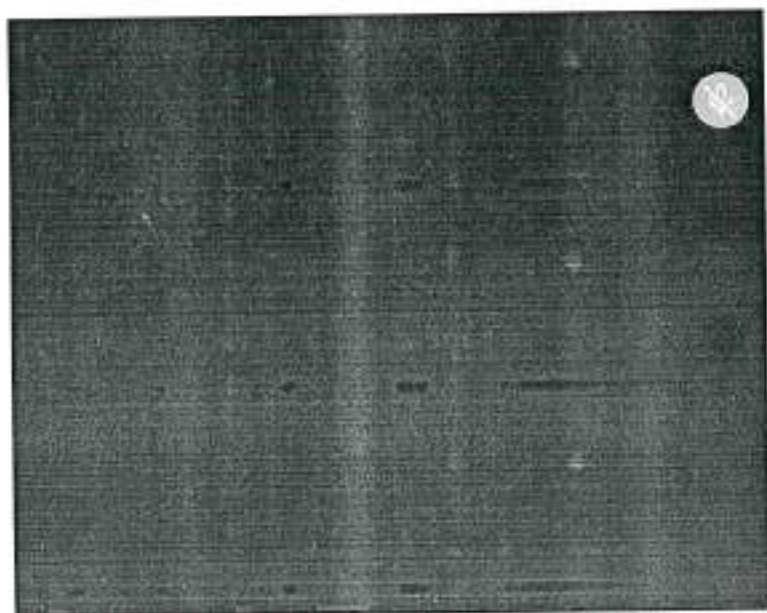
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CCROM is presenting

Principal
Mahatma Gandhi College
Thiruvananthapuram

Add- on Course on Advanced Excel (Dashboard Creation)organised by PG & Research Department of Commerce Mahatma Gandhi College in association with SkillsparkThe Finishing School Pvt. Ltd from march10th 2023 to March 19th 2023

Student Assessment Test Mark List

Sl No	Name	Marks Obtained out of 50
1	JOJOREXON	50
2	ANJU S	50
3	DEVIKA G R	40
4	EMINIA JOHNSON	42
5	MALAVIKA U S	40
6	CHELSY JOHN	44
7	RESHMA. L. R	42
8	MEGHA S NAIR	40
9	ASHWIN M V	46
10	ARSHA. P. R	40
11	SHAHIN. S	44
12	ANUSREE A S	36
13	MIDHUN.M	40
14	JISHA.S	50
15	NANDANA.S	40
16	RAHUL P N	40
17	PRANAV.S	40
18	ABHINAND RAJ	50
19	JISHITHA B	40
20	PRANAV DD	46
21	JISHNA VM	40
22	ANUSREE A S	44
23	ANU A S	40
24	SWATHY PREMKUMAR	48
25	AISWARYA I. S	50
26	MEGHA S NAIR	40
27	ANNYA ANILKUMAR	50
28	SWATHY PREMKUMAR	50
29	AMMU O S	40
30	JISHITHA B	48

31	KAVERI S GIRI	40
32	JEFIN JOSE	44
33	RADHIKA. R	46
34	PARVATHY KRISHNA S S	50
35	DEVIKA SREEKUMAR	40
36	NITHYAKRISHNAN	44
37	ANUPAMA MADHU	46
38	AJAY. M	40
39	NIRANJAN	48
40	ARATHY V S	42
41	APARNA S PRASAD	40
42	AHALYA KRISHNA	42
43	LAKSHMI MOHAN R	44
44	DEVIKA BHADRAN	50
45	RAUF KHAN	46
46	BHARATH S K	44
47	SOORYA S NAIR	40
48	HIMA V NAIR	50
49	GREESHMA SATHEESH	48

Coordinator

Head of the Department

Principal

Principal
Mahatma Gandhi College
Thiruvananthapuram

Report on Add on Course Dashboard Creation in Excel organised by PG & Research Department of Commerce Mahatma Gandhi College in association with Skillspark The Finishing School Pvt. Ltd from March10th 2023 to March 19th 2023

Introduction

PG & Research Department of Commerce Mahatma Gandhi College in association with Skillspark The Finishing School Pvt. Ltd organized a 10 day (*30 lecture hours*) add-on course on Dashboard Creation in Excel from March 10th 2023 to March 19th 2023 for PG and UG students through hybrid mode. Google meet and Microsoft Excel were the platforms used for this programme. The programme began on March 10th, 2023, at 11.30am with a prayer and was followed by Acharayanusmaranam. Dr. Dileep. A.S, Senate Member, University of Kerala and Head of the Department of Commerce at Mahatma Gandhi College proposed welcome speech. The presidential address was given by Prof. Dr. Nanthyath Gopalakrishnan., Principal, Mahatma Gandhi College. Dr. Pradeepkumar. N, Dr. Vinod A.S, Dr. Jayadev, Dr. Sumitha .R and Sri. Vishnu Gopan expressed felicitation to the programme and at 12.15 p.m., Sri. Rakesh S.(Programme Coordinator) gave a vote of appreciation to end the official inauguration. On March 21, 2023, at 10:00 AM., a valedictory ceremony for the 10-day course was held at the department seminar hall. Certificates to the participants were also distributed during this session.

Objective of the Programme

This programme primarily focused on areas in Advanced Excel especially dashboard creation to train students to pursue a career in the accounts & finance field. This was done in awareness of the reality that there are numerous employment prospects but a scarcity of multi-skilled candidates to meet companies' present needs.

Methodology of the Programme

MsJoanna Jose Pereira, CCROM cum Finance Faculty Skillspark, led a 30-hour expert session over 10 days using a blended learning strategy, which was the backbone of the programme, to accomplish the aforementioned objective. As per the feedback from the last course we offered, both online and offline sessions were conducted to have a better understanding of the topic.49 students chose to participate in this programme, and they registered using a Google Form provided to them.

Outcome of the Programme

The programme was a success and gave students a better grasp of ample of opportunities and career options they can choose from Commerce and related topics. The resource person also emphasised that career decision is one of the most significant decisions in one's life and therefore, it must not be taken under parents' compulsion or peer pressure. The session also provides students with information on the challenges they will face after finishing their studies. Students will surely profit from having the information they need to understand the significant changes taking place all around them. Google Forms were also used to gather comments and suggestions on the programme.

Coordinator

Head of Department

Principal

Tally Prime with GST

Department of Commerce

2022 – 23

Value Added Course
ON
Professional Accounting Using
TALLY PRIME

Organized by

PG & RESEARCH DEPARTMENT OF COMMERCE

MAHATMA GANDHI
COLLEGE, TRIVANDRUM
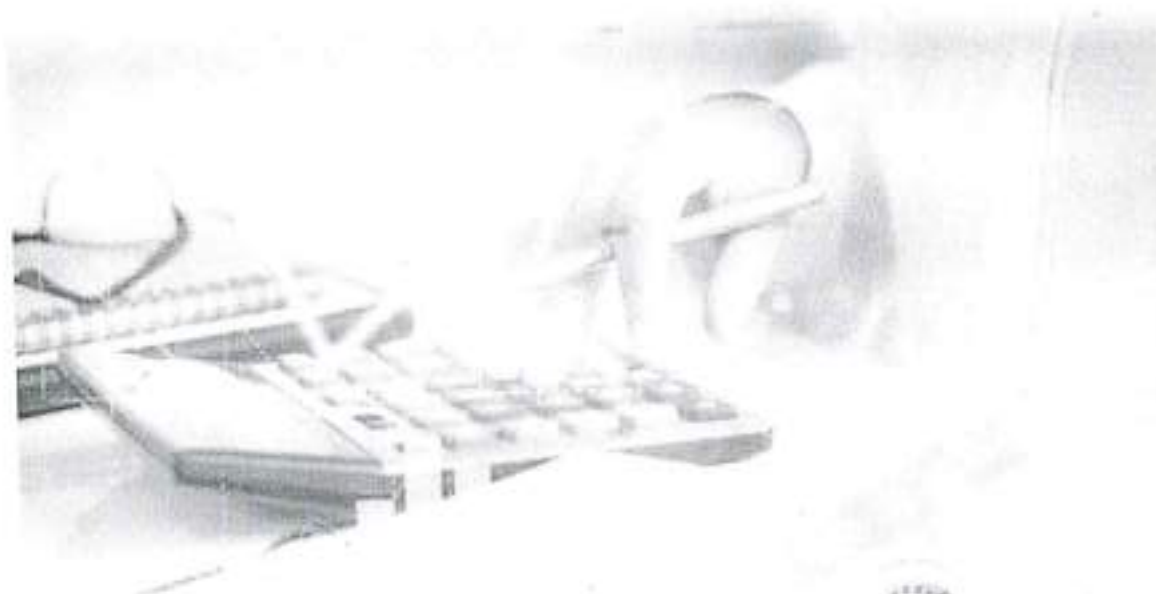
In Association with

Skillspark The Finishing School Pvt. Ltd
Trivandrum & Kollam

SKILLSPARK
THE FINISHING SCHOOL

From

July 4th **Monday** onwards
7:30 PM - 8:30 PM

Principal
Mahatma Gandhi College
Thiruvananthapuram

Jithin Madhu
Faculty

"Skills Speak louder
than degrees"

ROOM

<div align="center">Course Syllabus</div>

<div align="center">**Value Added Course on Professional Accounting using Tally Prime**</div>

The course's syllabus was divided into the following 10 modules:

Module 1 : Tally Introduction and Installation (3 Hours)

Accounting principles and concepts- Types of Accounts- Rules of accounting-
Introduction to Tally- How to install Tally prime- Short keys for the features in tally

Module 2 : Company creation Backup and Restore (3 Hours)

Creation of company- Configuration- Company features- How to alter a company- How
to delete a company- How to create backup of a company- Ledger creation in tally

Module 3 : Accounting Masters Ledger creation , Group (3 Hours)

Chart of groups- Groups- Multiple Groups- Ledgers- Multiple ledgers- Creation-
Alteration- Deletion

Module 4 : Introduction of Accounting Voucher & Entry (3 Hours)

Type of Vouchers- Default vouchers in Tally- How to give date in Tally- Creation of
Vouchers- Accounting Vouchers- Inventory Vouchers- Invoicing

Module 5 : Inventory Master Creation (3 Hours)

Stock groups- Multiple stock groups- Stock categories- Unit of Measure- Creation of
Stock items- How to check stock- How to change stock description

Module 6 : GST Introduction (3 Hours)

Introduction to GST- Types of transaction in GST- GST slab rates and items under each
slab- GST registration – Returns to filed by a person registered under regular scheme

Module 7 : GST Activation and Tax Ledgers Creation (3 Hours)

Compulsory registration- Activation of GST- GST ledger creation- Enabling GST while
creating stock item- How can we take GST reports- Practical problems

Module 8 : Tax Purchased and Sale Entry(Goods and Services) (3 Hours)

Purchase goods entry with GST- Purchase service entry with GST- Sales entry with
GST- Sales service entry with GST- IGST- UTGST- Practical problems

Module 9 : ITC and GST payment (3 Hours)

Introduction to Input tax credit- Setoff rules- Cross utilization- GST payment procedure

Module 10 : Composition Dealer (3 Hours)

Composite Scheme-Accounting procedure for composition scheme-Sales composition in Tally- Returns to filed in composite scheme

Dr. Rakesh S.

Principal
Mahatma Gandhi College
Thiruvananthapuram

ENROLLMENT LIST ON VALUE ADDED COURSE ON

PROFESSIONAL ACCOUNTING USING TALLY PRIME

Date & Time of Registration	Sl	Name	Batch	Mobile Number (Whatsapp)	E Mail Id	Do you have a reliable Internet connection?
2022/06/29 12:51:28 pm GMT+5:30	1	Greeshma Satheesh	PG	9400782054	greeshmasatheesh2@gmail.com	Yes
2022/06/29 12:52:41 pm GMT+5:30	2	PRANAV DD	PG	9048366542	pranavdevanand2000@gmail.com	Yes
2022/06/29 12:53:40 pm GMT+5:30	3	MIDHUN.M	PG	9895809664	midhun2000april@gmail.com	Yes
2022/06/29 12:53:41 pm GMT+5:30	4	Anupama Madhu	PG	9074260213	anupamamadhu5@gmail.com	Yes
2022/06/29 12:54:23 pm GMT+5:30	5	Kaveri S Giri	PG	9497599361	kaverisg2000@gmail.com	Yes
2022/06/29 12:59:53 pm GMT+5:30	6	Umakrishnan M	PG	8921658165	umakrishnan.m@gmail.com	Yes
2022/06/29 1:06:43 pm GMT+5:30	7	Ajay M	PG	8301028549	Ajabuz071@ gamil.Com	Yes
2022/06/29 1:14:35 pm GMT+5:30	8	Swathy premkumar	PG	7907821072	Swathynair000z@gmail.com	No
2022/06/29 1:15:40 pm GMT+5:30	9	SHAHIN S	PG	8547077009	shahinsshahulhameed@gmail.com	Yes
2022/06/29 1:18:18 pm GMT+5:30	10	DEVIKA BHADRAN	PG	7907227428	devikabhadransree@gmail.com	
2022/06/29 1:32:27 pm GMT+5:30	11	Sudhina S	PG	8921729022	sudhinasunil99@gmail.com	Yes
2022/06/29 1:33:30 pm GMT+5:30	12	Roshini R Nair	PG	7356057267	roshinirnair123@gmail.com	Yes
2022/06/29 1:33:32 pm GMT+5:30	13	SreeLekshmi L.S	PG	8547990305	lsreelekshmi83@gmail.com	Yes
2022/06/29 1:37:32 pm	14	Shibina. J	PG	8078308359	Shibinaj1999@gmail.com	Yes

2022/06/29 1:40:09 pm GMT+5:30	15	Meenu G.P	PG		7994893605	meenugirija. 1998@gmail.com	Yes
2022/06/29 1:44:50 pm GMT+5:30	16	Arya A S	PG		8590984609	aryaas7902@gmail.co m	Yes
2022/06/29 1:46:08 pm GMT+5:30	17	Sreereshma S.R	PG		8078180586	srsreereshma@gmail.c om	Yes
2022/06/29 1:49:19 pm GMT+5:30	18	Devika Sreekumar	PG		9188783294	devikagauri4@gmail.c om	Yes
2022/06/29 1:49:49 pm GMT+5:30	19	JAYALEKSH MI P	PG		8921600193	lekshmi9048@gmail.c om	Yes
2022/06/29 2:47:55 pm GMT+5:30	20	Lakshmi Mohan R	PG		8086631469	www.lakshmilechu19 99@gmail.com	Yes
2022/06/29 2:53:20 pm GMT+5:30	21	Neha Sabu	PG		9778243961	nehasabu075@gmail.c om	Yes
2022/06/29 3:54:45 pm GMT+5:30	22	Anjali Ajith K	PG		9895911662	anjaliajith916@gmail. com	Yes
2022/06/29 4:13:27 pm GMT+5:30	23	Anusree A S	PG		9895376089	ajusmitha1999@gmail . com	Yes
2022/06/29 4:36:56 pm GMT+5:30	24	Aiswarya I.S	PG		9074157112	aiswaryaisaiswarya20 @gmail.com	Yes
2022/06/29 8:38:25 pm GMT+5:30	25	Anu A S	PG		9020115715	anuvivek984@gmail.c om	Yes
2022/06/30 11:34:44 am GMT+5:30	26	Hima V Nair	PG		9544884897	Himahvn@gmail.com	Yes
2022/07/01 11:37:21 am GMT+5:30	27	Yadhu nandhan v u	UG		8943747004	yeduhash@gmail.com	Yes
2022/07/01 11:37:23 am GMT+5:30	28	Siva t nair	UG		7994493760	sivatnair2003@gmail. com	Yes
2022/07/01 11:38:05 am GMT+5:30	29	Dalykuttan Omanakuttan	UG		8547700299	okdkokdk25@gmail.c om	Yes
2022/07/01 11:41:33 am GMT+5:30	30	RESHMA RS	PG		9072073273	rkkunju88@gmail.co m	Yes
2022/07/01	31	Varsha SA	UG		6282597359	varshasa8848@gmail.	Yes

11:45:10 am GMT+5:30					com	
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2022/07/01 12:35:25 pm GMT+5:30	33	Nandhana MS	UG	7034912122	nandhana700@gmail.com	Yes
2022/07/01 12:35:44 pm GMT+5:30	34	Nantha Gopal M J	UG	9778209415	nanthagopalmj2002@gmail.com	Yes
2022/07/01 12:35:49 pm GMT+5:30	35	Soorya S S	UG	7356720643	sooryakannan004@gmail.com	Yes
2022/07/01 12:35:51 pm GMT+5:30	36	LEKSHMI R	UG	8590635756	lekshmir1866@gmail.com	Yes
2022/07/01 12:39:20 pm GMT+5:30	37	Jerin Johnson	UG	7356325236	johnsonjerin323@gmail.com	Yes
2022/07/01 12:39:32 pm GMT+5:30	38	G B ABHIRAM	UG	8590882867	abhiramgb02@gmail.com	Yes
2022/07/01 12:39:59 pm GMT+5:30	39	SOORAJ.S.S	UG	9778011468	15soorajachu@gmail.com	Yes
2022/07/01 12:41:05 pm GMT+5:30	40	Sandeep.Ravendran	UG	9633818486	sandeepsandeepbolt@gmail.com	Yes
2022/07/01 12:43:59 pm GMT+5:30	41	Anamika Rai	UG	6354641367	anamikarai262003@gmail.com	Yes
2022/07/01 12:45:44 pm GMT+5:30	42	Malavika M G	PG	9746078088	Itsmgmalavika@gmail.com	Yes
2022/07/01 12:45:56 pm GMT+5:30	43	Parvathy	PG	8590593283	parvathy9922@gmail.com	Yes
2022/07/01 12:46:23 pm GMT+5:30	44	Lavanya V S	PG	9496552143	lavanyaathu56708@gmail.com	Yes
2022/07/01 12:46:27 pm GMT+5:30	45	Pavithra Nair	PG	7736638398	devuanil19@gmail.com	Yes
2022/07/01 12:47:25 pm GMT+5:30	46	SHAINY S.	PG	9745768663	mailtoshainy2000@gmail.com	No
2022/07/01 12:49:00 pm	47	GOPIKA B	PG	9747792937	gopikakarthu05@gmail.com	Yes

GMT+5:30						
2022/07/01 1:44:50 pm GMT+5:30	48	Aparna S Prasad	PG	6238154951	neethups17091999@gmail.com	Yes

HoD

Principal
Mahatma Gandhi College
Thiruvananthapuram

Photo Gallery
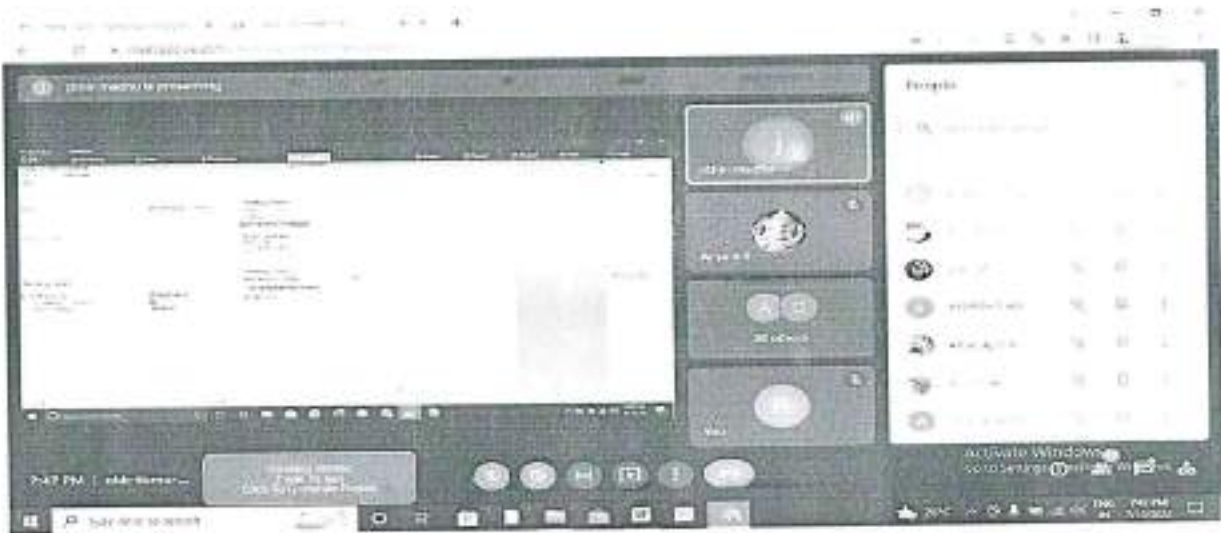
Value Added Course on Professional Accounting using Tally organised by PG & Research Department of Commerce, Mahatma Gandhi College in association with Skillspark The Finishing School Pvt. Ltd from July 4th 2022 to 15th 2022

Assessment Test Mark List

Sl. No.	Name of the Student	Marks Obtained Out of 40
1	GREESHMA SATHEESH	40
2	PRANAV DD	40
3	MIDHUN.M	40
4	ANUPAMA MADHU	40
5	KAVERI S GIRI	40
6	UMAKRISHNAN M	40
7	AJAY M	40
8	SWATHY PREMKUMAR	36
9	SHAHIN S	38
10	DEVIKA BHADRAN	40
11	SUDHINA S	40
12	ROSHINI R NAIR	38
13	SREELEKSHMI L.S	40
14	SHIBINA. J	40
15	MEENU G.P	40
16	ARYA A S	40
17	SREERESHMA S.R	40
18	DEVIKA SREEKUMAR	40
19	JAYALEKSHMI P	40
20	LAKSHMI MOHAN R	40
21	NEHA SABU	40
22	ANJALI AJITH K	40
23	ANUSREE A S	40
24	AISWARYA I.S	38
25	ANU A S	36
26	HIMA V NAIR	40
27	YADHU NANDHAN V U	34

28	SIVA T NAIR	36
29	DALYKUTTAN OMANAKUTTAN	40
30	RESHMA RS	40
31	VARSHA SA	40
32	VARAH R	38
33	NANDHANA MS	34
34	NANTHA GOPAL M J	36
35	SOORYA S S	40
36	LEKSHMI R	40
37	JERIN JOHNSON	40
38	G B ABHIRAM	40
39	SOORAJ.S.S	38
40	SANDEEP.RAVEENDRAN	36
41	ANAMIKA RAI	40
42	MALAVIKA M G	40
43	PARVATHY	40
44	LAVANYA V S	36
45	PAVITHRA NAIR	38
46	SHAINY S.	40

For HOD

Principal
Mahatma Gandhi College
Thiruvananthapuram

Report on Value Added Course on Professional Accounting using Tally Prime organised by PG & Research Department of Commerce Mahatma Gandhi College in association with Skillspark The Finishing School Pvt. Ltd from July 4th 2022 to July 15th 2022

Introduction

PG & Research Department of Commerce Mahatma Gandhi College in association with Skillspark The Finishing School Pvt. Ltd organized a 10 day (30 *lecture hours*) Value Value Added Course on *Professional Accounting using Tally Prime* from July 4th 2022 to July 15th 2022 for PG and Second Year UG students through online mode. Google meet and Tally prime were the platforms used for this programme. The programme began on July 4th 2022 at7.30 pm with a prayer and was followed by Acharayanusmaranam. Dr. Dileep. A.S, Senate Member, University of Kerala and Head of the Department of Commerce at Mahatma Gandhi College proposed welcome speech. The presidential address was given by Dr. Ambili M., Principal, Mahatma Gandhi College. Dr. Pradeepkumar. N, Dr. Vinod A.S, Dr. Jayadev.S, Dr. Sumitha .R and Sri. Vishnu Gopan expressed felicitation to the programme and at 8:00 p.m., Sri. Rakesh S.(Programme Coordinator) gave a vote of appreciation to end the official inauguration. On July 15, 2022, at 10:00 p.m., a closing ceremony for the 10-day course was held online. On July 18, 2022, at the Commerce Department, newly appointed Principal Dr. V.M. Anandakumar distributed certificates to the participants.

Objective of the Programme

This programme primarily focused on trending areas in Digital Technologies, Professional Accounting, and Administration Field to train individuals completely in computerised accounting using Tally Prime to pursue a career in this field. This was done in recognition of the fact that there are significant career opportunities but a lack of multi-skilled candidates to fulfill current needs of companies.

Methodology of the Programme

Mr. Jithin Madhu, Faculty Head Skillspark, led a 30 hour expert session over 10 days using a blended learning strategy, which was the backbone of the programme, to accomplish the aforementioned objective.48 students chose to participate in this programme, and they registered using a Google Form provided to them.

Outcome of the Programme

The course was successful and educational, and it helped students have a better understanding of several areas of practical accounting using Tally Prime such as accounting entries, inventory control, financial reporting, and GST.They will undoubtedly benefit from having the necessary tools for meeting the industrial requirements. In addition, an assessment test was given to evaluate the effectiveness of the course.Google Forms were also used to gather comments and suggestions on the course.

Coordinator

Head of the Department

Principal

Principal
Mahatma Gandhi College
Thiruvananthapuram

Applied Economics using GRETL

Department of Economics

2022 – 23

DEPARTMENT OF ECONOMICS

MAHATMA GANDHI COLLEGE
THIRUVANATHAPURAM

Is Offering a course
On

APPLIED ECONOMETRICS USING GRETL

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

COURSE DURATION

30 HOURS

STARTING FROM

Faculty

SRUTHI.S
ASST.PROFESSOR
DEPT.ECONOMICS
MG COLLEGE,
TVPM

31ST AUGUST 2022

INTRESTED STUDENTS CONTACT THE DEPARTMENT

PRIYA L G
Head of the Department
PG Dept
M
Th

From

The HOD

Department of Economics

Mahatma Gandhi College, Tvpm.

22nd July 2022

Thiruvananthapuram

To

The Principal

Mahatma Gandhi College, Tvpm.

[Request for the approval of Add on course for the academic year 2022-23]

Sir/Ma'am,

The department is planning to offer an add on course during the academic year 2022-2023 under the title **"EC 33 Applied Econometrics using GRETL".** Smt Sruthi S, Assistant Professor, Department of Economics, Mahatma Gandhi college will be the course coordinator as well as the instructor. We have planned for a 30-hr course which is expected to commence by last week of August 2022 and is expected to conclude before February 2023. The targeted group is the Economics Graduate and Post-Graduate students. The details of the course are attached herewith.

Thanking You

Yours' sincerely

HoD

PRIYA L G
Head of the Department
PG Department of Economics
Mahatma Gandhi College
Thiruvananthapuram

Permitted

22/07/22

EC 33: Applied Econometrics using GRETL

Academic Year 2022-2023
Mahatma Gandhi College
Thiruvananthapuram

EC 33: Applied Econometrics using GRETL

Course Synopsis

This is a course designed for final year undergraduate B A Economics or any M.A Economics student who has done a basic course in Econometrics in their undergraduate programme. The course is designed to extend students' knowledge of basic econometric concepts and techniques learnt in Econometrics. Students will learn multiple linear regression techniques with dummy variables, more functional forms, concepts of measurement errors, multicollinearity and heteroskedasticity. These skills can be utilized in analysing data across multiple disciplines such as economics, political science, finance, business etc.

GRETL is a powerful free statistical software that allows us numerous ways to analyse, manipulate and present data. This course is designed to provide an introduction to this software, which can perform both basic as well as advanced statistical analyses. It is **not** intended to explain you the statistical and/or econometric methods. Students will be introduced to some basic features of Stata (e.g., learning how to do data analysis using econometric tools) leading to efficient data management skills. We will include several topics on statistical analyses, performing regression analyses, as well as delving into the territory of graphics.

Prerequisites

- Basic Econometrics, Basic Mathematics, Simple understanding of Hypothesis testing and Distributions.
- Laptop or desktop is recommended. [Those who want to do the course but don't have laptop or desktop can contact the instructor and get lab assistance from the college.]

Course Outcome

Participants who successfully complete the course are expected to understand:

1. How to estimate OLS (simple linear and multiple linear regressions)
2. CLRM assumptions and how violations of these assumptions can affect statistical inferences;
3. How to interpret OLS statistics in different functional forms
4. Multicolliniarity and Heteroskedasticity (various test and remedies)
5. Instrumental variable approach to regression analysis;
6. Basics of the GRETL or Microsoft Excel used by economists to analyse economic data.

Class Timing

Morning Slot: 8:00 to 9:30
Evening Slot: 3:30 to 5:00

The class timings are fixed dates will be intimated later after the inaugural class.

Instructors and Hours

Instructor : Sruthi S
Preferred Contact : sruthi@mgcollegetvm.org

Readings

- Required Textbook: Wooldridge, J. M. (2009). Introductory Econometrics: A modern approach, 6th edition, Cengage Learning, India. [JW]
- Stock, J. H. & Watson, M. W. (2019). Introduction to Econometrics, 4th edition, Pearson [SW].
- Damodar N Gujarati and Dawn C Porter (2009): Basic Econometrics, Fifth Edition, McGraw Hill International Edition. [GJ]
- Damodar N Gujarati (2011): Econometrics by Example, First Edition, Palgrave, MacMillan.[GJX]
- AH Studenmund: Using Econometrics: A Practical Guide, Fifth Edition, Pearson Education [SM]

Assessment

Evaluation will be 50% (internal lab exam in GRETL), 40% (Internal Written Exam: MCQ) and 10% for attendance and class participation.

Assessments:

You will have several assessments throughout the course. The classes will include lecture, lab sessions and the assessment will also be done continuously based on your performance in understanding the software and also your efficiency in understanding various econometric problems using GRETL.

Exams: There will be no assignment for the course. There will be a final exam (40% of your grade). The final exam will be held according to university schedule.

Academic Integrity: Academic Honesty, Cheating, and Plagiarism as per university policy.

Attendance Policy: As per University policy for any other regular course degree course.
Course Contents

Syllabus

30 Hrs

Module I: Simple Linear & Multiple Regression Model   10 Hrs

Introduction to Econometrics -The concept of PRF & SRF -Significance of stochastic error term- Method of ordinary least squares- Assumptions underlying the method of least squares- Properties of estimators- Gauss Markov Theorem-Coefficient of determination, r2 - Hypothesis testing- t and F tests-P value- Practical versus statistical significance-Prediction-

Multiple coefficients of determination R2 and adjusted R2-Hypothesis testing-Testing the overall significance of the regression model-F test

Module II: Econometric Problems and their testing   10 Hrs

Multicollinearity- Nature, consequences, detection and remedial measures-Autocorrelation-Nature, consequences, detection, and remedial measures- Heteroskedasticity-Nature, consequences, detection and remedial measures.
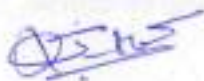
Module III: Dummy Variable Regression Model   10 Hrs

Dummy variable-ANOVA models-ANCOVA models-Dummy variable trap-Dummy variables and seasonal analysis-Structural analysis-Piecewise linear regression.

Important: This syllabus is intended to give the student guidance in what may be covered during the semester and will be followed as closely as possible. However, the instructor reserves the right to modify, supplement and make changes as the course needs arise.

- Multiple Regression Analysis: Further Issues
JW: Chapter 6
- Multiple Regression Analysis with Qualitative Information
JW: Chapter 7 and SW: Chapter 11
- Heteroskedasticity

faculty

SRUTHI S
Assistant Professor
Department of Economics
ma Gandhi College, TVPM

PRIYA L G
Head of the Department
PG Department of Economics
Mahatma Gandhi College
Thiruvananthapuram

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

2022-23

Applied Econometrics using GRETL

Faculty:	SRUTHI S
Start Date:	31st August 2022
End Date:	23rd January 2023
Hours:	32 hours
No of Days	27 days
Total no of reg students:	45

STUDENT LIST

sl no	Register number	Name
1	15020118003	ADHITHYA K A
2	15020118006	AMITHA . A . J
3	15020118009	ANOKHA S
4	15020118013	DEVIKA Y S
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15	15020118038	ATHIRA .S
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17	15020118045	GAYATHRI S A
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23	15020118053	PRANAY PRASANTH
24	15020118055	RESHMA R.G
25	15020118057	S GOKUL
26	15020118058	S SANGEETH SURESH
27	15020118014	LEKSHMI S
28	15020118065	SREELEKSHMI V S
29	15020118073	THIRTHA K
30	15020118075	GOWTHAMLAL
31	55022118002	AKHILA N S
32	55022118003	ALEX S DAS
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43	55022118014	SREEDEVI B
44	55022118015	SREERAKHI S S
45	55022118016	TEJI J

Instructor

SRUTHI S
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Department of Economics
Mahatma Gandhi College, Tvpm

Applied Econometrics using
GRETL (EC 33)

January 23rd, 2023

NAME:
SECTION: *[Sample Question paper with solutions (answer key)]*

Instructions: Calculators are allowed.
Total Marks: 20 points.

1. **[1 point]** In the equation $y = B_0 + B_1 x + u$, B_0 is the_____.

    (a) dependent variable

    (b) independent variable

    (c) slope parameter

    (d) intercept parameter

2. **[1 point]** If an independent variable in a multiple linear regression model is an exact linear combination of other independent variables, the model suffers from the problem of_____.

    (a) perfect collinearity

    (b) homoskedasticity

    (c) heteroskedasticty

    (d) omitted variable bias

3. **[1 point]** The assumption that there are no exact linear relationships among the independent variables in a multiple linear regression model fails if_____, where n is the sample size and k is the number of parameters.

    (a) $n > 2$

    (b) $n = k + 1$

    (c) $n > k$

    (d) $n < k + 1$ **Ans: D**

4. **[1 point]** The Gauss-Markov theorem will not hold if_____.

    (a) the error term has the same variance given any values of the explanatory variables

    (b) the error term has an expected value of non-zero given any values of the independent variables

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(c) the independent variables have no exact linear relationships among them

(d) the regression model relies on the method of random sampling for collection of data

5. **[1 point]** A model suffers from the problem of endogeneity if

   (a) OLS estimators are not predicted precisely.

   (b) The unobservables do not have constant variance.

   (c) Zero conditional mean assumption does not hold.

   (d) When x_i is uncorrelated with u

6. **[1 point]** True or False: The estimate $\hat{\sigma}$ is interesting because it is an estimate of the standard deviation of the unobservables affecting y. In other words, it estimates the standard deviation in y after the effect of x has been taken out and is called the standard error (s.e.). **True**

7. **[1 point]** True or False: The term "linear" in a multiple linear regression model means that the equation is linear in the independent variables. **False**

8. **[1 point]** True or False: The regression model, $ceosalary = \hat{\alpha}_0 + \hat{\alpha}_1 ceoten + \hat{\alpha}_2 ceoten^2 + \hat{\alpha}_3 gender$ violates the assumption MLR.3. **False**

9. **[1 point]** True or False: Overspecifying a model that satisfies MLR. 1. through MLR. 4. has undesirable effects on the unbiasedness and efficiency of OLS estimators. **False**

10. **[1 point]** True or False: MLR. 3. rules out certain relationships between explanatory variables and MLR. 4. rules out relationships between unobservables and regressors. **True**

11. **[2 points]** True or False: Larger the sampling variance in x in an SLR model, larger the sampling variance for OLS estimators. **False**

12. **[2 points]** CEO salary and return on equity regression model looks like the following

$$salary = 963.191 + 18.501 roe$$
$$n = 209, R^2 = 0.0132$$

The percentage of salary variations for CEO's salary left unexplained by roe is

   (a) 13.2%

   (b) 1.32%

   (c) 98.68%

   (d) 18.501% **Ans: C**

13. Using data on 5000 college students, the following equation was estimated by OLS

$$colGPA = 1.467 - 0.0128 hsperc + 0.00192 sat$$
$$n = 5000 \quad R^2 = 0.23.4$$

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where *colGPA* is measured on a 4-point scale, *hsperc* is the percentile in the high school graduating class (defined so that, for example, *hsperc* = 5 means the top 5% of the class), and *sat* is the combined math and verbal scores on the student achievement test.

(a) **[2 points]** The predicted college GPA when *hsperc* = 20 and *sat* = 1, 050 is:

    i. 2.676

    ii. 3.227

    iii. 2.978

    iv. 3.576 **Ans: ii**

(b) **[2 points]** Suppose that two high school graduates, A and B, graduated in the same percentile from high school, but Student A's SAT score was 140 points higher (about one standard deviation in the sample). What is the predicted difference in college GPA for these two students?

    i. 0.2688

    ii. 1.0934

    iii. 0.3012

    iv. 0.2072 **Ans: i**

(c) **[2 points]** Holding *hsperc* fixed, what approximate difference in SAT scores leads to a predicted *colgpa* difference of .50, or one-half of a grade point?

    i. 338

    ii. 200

    iii. 220

    iv. 260 **Ans: iv**

Prepared by

SRUTHI S
Assistant Professor
Department of Economics
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Verified by

Head of the Department
PG Department of Economics
Mahatma Gandhi College
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Mahatma Gandhi College
Thiruvananthapuram

3

2022-23

Applied Econometrics using GRETL

Faculty:	SRUTHI S		
Start Date:	31st August 2022		
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EVALUATION SHEET

sl no	Register number	Name	Marks	lab Grade	Sign
1	15020118003	ADHITHYA K A	17	A	
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5	15020118015	MEKHA S	17	A	
6	15020118016	NANDANA A S	17	A	
7	15020118017	NIVA A S	16	A	
8	15020118018	RADHIKA R.S	16	A	
9	15020118026	ADHITHYA SANKAR A A	18	A +	
10	15020118029	AKASH B MANOHAR	17	A	
11	15020118033	ARATHI B S	16	A	
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36	55022118007	ELA B	17	A	
37	55022118008	GOURI SANKAR S	16	A	
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44	55022118015	SREERAKHI S S	18	A	
45	55022118016	TEJI J	18	A	

Faculty

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Assistant Professor
Department of Economi
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PRIYA L G
Head of the Department
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Mahatma Gandhi College
Thiruvananthapuram

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

REPORT

EC 33: Applied Econometrics using GRETL

Last year when the department offered the course only P G students participated. So, this year the department gave few introductory classes to UG students to encourage their participation as well. Based on last year's feedback we arranged smaller duration lab hours along with lecture hours to make it more efficient. Even though there was no much alterations in the curriculum of the course; the course delivery undertook a sea change.

GRETL being a free and student friendly software students were able to understand the basic concepts of econometric modelling as well as hypothesis testing. 2 to 3 students were clubbed into one group for the lab hours which was 1.5 hrs. rest of the sessions were planned as 1 hr sessions.

Creative Writing

Department of English

2022 – 23

ADD ON COURSE ON CREATIVE WRITING

DEPARTMENT OF ENGLISH

M.G COLLEGE, TRIVANDRUM

Notice

The P.G department of English is planning to conduct an Add on course **Creative writing from** January 2023 onwards. Students who are interested please contact the course co-ordinators Minu Balakrishnan and Simi Thulasidas, Dept of English.

Dr. VIDYA RAJAGOPAL
Associate Professor and Head
P.G. Dept. of English
Mahatma Gandhi College
Research Guide, University of Kerala
Thiruvananthapuram

Principal
Mahatma Gandhi College
Thiruvananthapuram

ADD ON COURSE IN CREATIVE WRITING.

The Add on Course in Creative Writing provides an introduction to the foundations of creative writing in English. It aims at imparting the key concepts of traditional and modern forms of creative writing and shaping the amateur's mind into the professional writer's mind. Thus, the course will provide the basics of creative writing such as fundamental principles and elements of writing, and introduce the traditional and new modes/forms of creative writing to the aspiring and budding writers.

Objectives:

The prime objectives of this course are:

i. To acquaint the learners with ideas related to creative writing including the art, the craft

and the basic skills required for a creative writer

ii. To help learners to understand the principles of creative writing and the distinction between the literary genres

iii. To explain the differences in writing for various literary and social media

iv. To hone the creative and critical faculties of learners

v. To enable learners to put into practice the various forms of creative writing that they have

studied through the course

Learning Outcomes:

At the end of the course, learners will be able to:

i. Distinguish between the literary genres

ii. Write for various literary and social media

iii. Critically appreciate various forms of literature

iv. Make innovative use of their creative and critical faculties

v. Seek employment in various creative fields

SYLLABUS

Unit I: Fundamentals of Creative Writing: (06 Lectures)

- Meaning and Significance of Creative Writing
- Genres of Creative Writing: poetry, fiction, non-fiction, drama and other forms
- Research for Creative Writing

Unit II: Elements of Creative Writing: (08 Lectures)

- Plot, Setting, Character, Dialogue, Point of View
- Literary Devices and Figurative Language
- Elements of Style
- Grammar and the Structure of Language

Proof Reading and Editing

Unit III: Traditional Forms of Creative Writing: (08 Lectures)

- Fiction: short story, novella and novel
- Poetry
- Drama
- Essay
- Fable
- Biography, Memoire and Autobiography
- Travelogues, Diaries, Self-Narrative Writing

Unit IV: New Trends in Creative Writing (08 Lectures)

- Web Content Writing and Blog Writing
- Script Writing
- Journalistic Writing
- Copywriting
- Graphic Novel
- Flash Fiction

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DEPARTMENT OF ENGLISH
MAHATMA GANDHI COLLEGE
THIRUVANANTHAPURAM
ADD ON COURSE ENROLMENT LIST (2022-23)
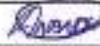
The following students enrolled for the add on course offered by the
Department of English.

SL no	Candidate Code	Name of the student	SUBJECT
1.	13022118001	ANANDHU. J.S	ENGLISH
2.	13022118002	ARJUN. A.M	ENGLISH
3	13022118003	ATHIRA J S	ENGLISH
4	13022118004	DEVANANTH A M	ENGLISH
5	13022118005	GADHA. V. L	ENGLISH
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17	13022118017	ASWINA A	ENGLISH
18	13022118018	BHODHIMITRA V S	ENGLISH
19	13022118019	BIDHUN M B	ENGLISH
20	13022118020	DARSANA SREELAKSHMI S	ENGLISH
21	13022118021	GAUTHAM V .S	ENGLISH
22	13022118022	JAYASREE J S	ENGLISH
23	13022118023	KESAV S NAIR	ENGLISH
24	13022118024	MEERA GOURI T	ENGLISH
25	13022118025	NAVAMI HARSHAKUMAR	ENGLISH
26	13022118026	PARVATHY M S	ENGLISH
27	13022118027	SAFIA R	ENGLISH
28	13022118028	SIDHARTH M S	ENGLISH
29	13022118029	SOUHRID.B.B	ENGLISH
30	13022118030	SREE CHANDANA	ENGLISH

31	13022118031	SUMITHA S NAIR	ENGLISH
32	13022118032	VARSHA VIJAYAN	ENGLISH
33	13022118033	VYSHAKH KJ	ENGLISH
34	13022118034	GOPIKA GOPAN D	ENGLISH
35	13022118035	NIKHIL MANHAS	ENGLISH
36	13022118036	SHIBIN .C	ENGLISH
37	13022118037	SURAJIT DUTTA	ENGLISH
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40	13020118001	ABHINAV DP	ENGLISH
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46	13020118022	APARNA S	ENGLISH
47	13020118025	GOWRI V	ENGLISH
48	13020118028	R.S GOWRI	ENGLISH
49.	13020118032	SREETHU B.S	ENGLISH
50	13020118035	ABHIDEV A.S	ENGLISH
51	13021118001	ABHISHA U.R	ENGLISH
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56.	13021118034	LEKSHMI V.G	ENGLISH
57.	13021118036	SABARI T.S	ENGLISH
58	13021118037	SIDDHY SANTHOSH	ENGLISH
59	13021118038	SOORAJ VENUGOPAL	ENGLISH
60	13021118039	SWATHY P.S	ENGLISH

DEPARTMENT OF ENGLISH
MAHATMA GANDHI COLLEGE
THIRUVANANTHAPURAM
ADD ON COURSE ENROLMENT LIST (2022-23)

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43	13020118012	KAVYA A	
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45	13020118020	ABDUL HASSAN A	
46	13020118022	APARNA S	
47	13020118025	GOWRI V	
48	13020118028	R.S GOWRI	
49.	13020118032	SREETHU B.S	
50	13020118035	ABHIDEV A.S	
51	13021118001	ABHISHA U.R	
52	13021118004	ARYA NAIR L	
53	13021118012	NANDANA A.R	
54.	13021118024	ARAVIND S	
55	13021118031	SYAMA S.S	
56.	13021118034	LEKSHMI V.G	
57.	13021118036	SABARI T.S	
58	13021118037	SIDDHY SANTHOSH	
59	13021118038	SOORAJ VENUGOPAL	
60	13021118039	SWATHY P.S	

MAHATMA GANDHI COLLEGE, TRIVANDRUM
ADD ON COURSE: CREATIVE WRITING

Max marks : 25

Answer all questions

1. If you were to write a novel, which aspect of the novel would you concentrate on the most-Character, Plot, Setting or Mode of Narration? Why? Give reasons with examples.

2. Write a short dramatic script involving a comic situation, giving emphasis to dialogue and non-verbal elements.

3. Edit and proof read the following paragraph and prepare it for publication. Then rewrite the final version as you would like it to be published.

The Roots of modernism emerged in the middle of the nineteenth century, in France with Charles Baudelaire in literature, Eduard Manet in painting and Gustave Flaubert in prose faction. In the 1980s, a strand of thinking began to assert that it was necessary to do away with the old norms entirely. In the 15yrs of the twentieth century, some writers' thinkers artists made the break with traditional Means of organising literature painting and music. modernism in general, includes the activities and creations of those whom felt the traditional forms of Art architecture. The modernist literature was characterised by a rejection of the 19th century traditions and of their consensus between author and reader. modernist tried to break away from the conventions of the Victorian era. They wished to Distinguish themself from the history of art and literature. Ezra pound with his famous Dictum 'make it new' captured the essence of modernism. Therefore, in order to create something new, they had to create new forms of writing. J.M.W Turner being one of the greatest landscape painters of the 19th century believed that his works should express significant historical literary or other narrative themes unlike the French impressionists who had unconventional formulas.

4. Develop a short story/poem/short play using any 3 of the tropes and figures of speech given below, clearly underling and labelling them : (i) Simile, (ii) Hyperbole, (iii) Symbol, (iv) Oxymoron, (v) Pidgin , (vi) Alliteration.

5. What is an editorial? Explain with reference to other kinds of writing in newspapers?

MAHATMA GANDHI COLLEGE
DEPARTMENT OF ENGLISH
ADD ON COURSE MARKLIST (2022-23)

SL no	Candidate Code	Name of the student	MARKS /25
1.	13022118001	ANANDHU. J.S	20
2.	13022118002	ARJUN. A.M	18
3	13022118003	ATHIRA J S	22
4	13022118004	DEVANANTH A M	16
5	13022118005	GADHA. V. L	15
6	13022118006	GOKUL A	18
7	13022118007	HARANI A S	22
8	13022118008	NAKSHATHRA P S	21
9	13022118009	SRIKARTHIK. B	22
10	13022118010	ABHIRAM B	16
11	13022118011	ADITHYA C M	18
12	13022118012	AKSHARA C A	17
13	13022118013	ALAN.B.SHALU	21
14	13022118014	ANAMIKA C R	20
15	13022118015	ANAND S. S	13
16	13022118016	ARJUN. S. NAIR	18
17	13022118017	ASWINA A	16
18	13022118018	BHODHIMITRA V S	16
19	13022118019	BIDHUN M B	18
20	13022118020	DARSANA SREELAKSHMI S	19
21	13022118021	GAUTHAM V .S	20
22	13022118022	JAYASREE J S	21
23	13022118023	KESAV S NAIR	20
24	13022118024	MEERA GOURI T	19
25	13022118025	NAVAMI HARSHAKUMAR	17
26	13022118026	PARVATHY M S	19
27	13022118027	SAFIA R	21
28	13022118028	SIDHARTH M S	20
29	13022118029	SOUHRID.B.B	17
30	13022118030	SREE CHANDANA	17
31	13022118031	SUMITHA S NAIR	18

32	13022118032	VARSHA VIJAYAN	18
33	13022118033	VYSHAKH KJ	19
34	13022118034	GOPIKA GOPAN D	19
35	13022118035	NIKHIL MANHAS	20
36	13022118036	SHIBIN .C	15
37	13022118037	SURAJIT DUTTA	16
38	13022118038	SURAJITHKUMAR K S	18
39	13022118039	ARAVINDH. A.S	17
40	13020118001	ABHINAV DP	18
41	13020118005	ANANDHU H.S	21
42	13020118010	DRISYA V.S	20
43	13020118012	KAVYA A	21
44	13020118015	SHIFA NAVAS R	21
45	13020118020	ABDUL HASSAN A	20
46	13020118022	APARNA S	19
47	13020118025	GOWRI V	18
48	13020118028	R.S GOWRI	18
49.	13020118032	SREETHU B.S	17
50	13020118035	ABHIDEV A.S	17
51	13021118001	ABHISHA U.R	19
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54.	13021118024	ARAVIND S	20
55	13021118031	SYAMA S.S	20
56.	13021118034	LEKSHMI V.G	19
57.	13021118036	SABARI T.S	18
58	13021118037	SIDDHY SANTHOSH	18
59	13021118038	SOORAJ VENUGOPAL	17
60	13021118039	SWATHY P.S	19

Principal
Mahatma Gandhi College
Thiruvananthapuram

ADD ON COURSE: REPORT ON SESSIONS HELD (2022-23)

Date: JANUARY 2023 ONWARDS

Creative writing classes at the undergraduate level aim to nurture students' writing abilities, stimulate their imaginations, and enhance their expressive and critical thinking skills. These courses encourage students to explore various literary forms, genres, and styles, fostering a deep appreciation for the art of writing.

Significance:

Creative writing classes offer several key benefits, including:

- Improved writing skills: These classes help students develop and refine their writing techniques, including grammar, syntax, and style.
- Enhanced creativity: Students are encouraged to think imaginatively, fostering creativity that can be applied to various aspects of life.
- Critical thinking: Creative writing promotes the critical analysis of literature and the world around us, honing analytical and problem-solving skills.
- Communication skills: Through written and verbal critiques and presentations, students refine their communication abilities.

Structure:

- 30 Hour Syllabus
- Time: 3.30-4.30
- Classes were handled by the teachers of the department.
- Workshops: Students share and critique each other's work, providing constructive feedback.
- Reading assignments: Students analyse and discuss published works, gaining exposure to various styles and voices.
- Writing assignments: These exercises encourage students to experiment with different forms, genres, and topics.
- Guest speakers: Authors and professionals visited the class to share insights and advice. (Dr. Kaikasi V.S, Assistant Professor, Department of English, University college, Trivandrum, Dr. Deepa Prasad, Associate Professor, Department of English, University College Trivandrum.)

Prinkipal
Mahatma Gandhi College
Thiruvananthapuram

Dr. VIDYA RAJAGOPAL
Associate Professor and Head
P.G. Dept. of English
Mahatma Gandhi College
Research Guide, University of Kerala

Thiruvananthapuram,KL,India
Kesavadasapuram, Thiruvananthapuram,
695004, KL, India
Lat 8.531629, Long 76.943085
01/18/2023 10:46 AM GMT+05:30
Note : Captured by GPS Map Camera

Thiruvananthapuram,KL,India
Kesavadasapuram, Thiruvananthapuram,
695004, KL, India
Lat 8.531602, Long 76.943113
01/18/2023 11:02 AM GMT+05:30
Note : Captured by GPS Map Camera
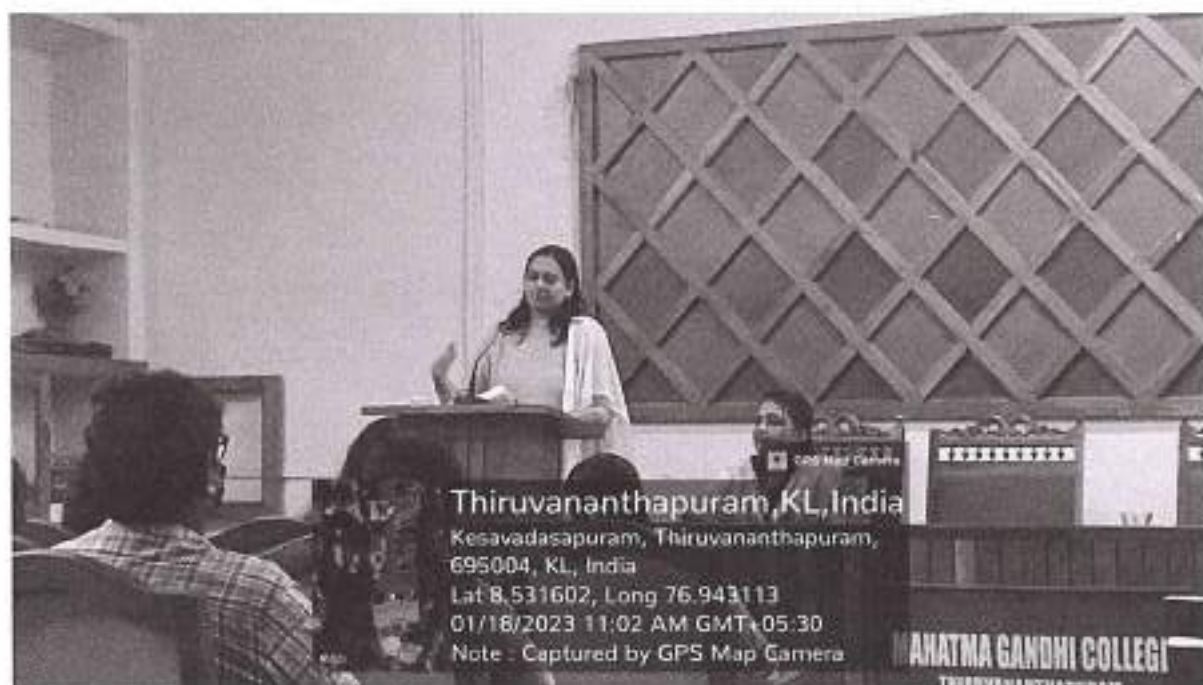
Organic Farming
Department of Hindi
2022 – 23

MAHATMA GANDHI COLLEGE

KESAVADASAPURAM,THIRUVANANTHAPURAM

(Accredited with B+ Grade by NAAC)

POST GRADUATE AND RESEARCH DEPARTMENT OF HINDI
(In Association With IQAC)

ADD-ON COURSE
Organic Farming
INAGURATION PROGRAM

The Department of Hindi, Mahatma Gandhi College is pleased to invite you to the Add-On Course (Organic Farming) INAGURATION PROGRAME scheduled to be conducted on 12/9/2022 in association with IQAC, Mahatma Gandhi College, Thiruvananthapuram.

PROGRAMS

Prayer &
Acharya Anusmaranam : **STUDENTS**

Welcome Speech : **Dr.RAJESH KUMAR R.**
(Add-On Course ,Organic Farming, Co-Ordinator)

Inaguration : **DR V.M.ANANDA KUMAR**
(Principal, Mahatma Gandhi College)

Felicitation : **Dr.RATHEESH KUMAR .V K.**
(IQAC Co-Ordinator)

Dr.SREEDEVI T.
(Associate Professor,Hindi Department, Mahatma Gandhi College)

Vote Of Thanks : **Dr.GAYATHRY N.**
(Assistant Professor,Hindi Department, Mahatma Gandhi College)

——— NATIONAL ANTHEM ———

12/09/2022   10.30AM   SEMINAR HALL

MAHATMA GANDHI COLLEGE
THIRUVANANTHAPURAM

POST GRADUATE AND RESEARCH DEPARTMENT OF HINDI

ADD ON COURSE (BASICS OF ORGANIC FARMING)

Students List

Sl. No	Name	Candidate Code	Signature
1.	Abhijith. S.	52522118001	
2.	Abhiram. V. Nair	52522118002	
3.	Ahalya. S. S	52522118004	
4.	Aiswarya. R.	52522118005	
5.	Akshaya. S. R	52522118006	
6.	Amritha Krishna. P. S	52522118007	
7.	Anjana. A. R	52522118008	
8.	Anjana. S. A	52522118009	
9.	Aparna. A. P	52522118010	
10.	Archana Anil	52522118011	
11.	Athira. A. Nair	52522118012	
12.	Greeshma. K. G	52522118013	
13.	Jeena Jayan	52522118014	
14.	Jyothika. S.	52522118015	
15.	Karthik. M.	52522118016	
16.	Lal. S.	52522118017	
17.	Lekshmi. L. S	52522118018	

Head of the Department
Dr. Ushakumari. J. B
P.G. & Research Dept. of Hindi
Mahatma Gandhi College
Thiruvananthapuram

Principal
Mahatma Gandhi College
Thiruvananthapuram

Course Co-Ordinator

Dr. R. Rajesh Kumar
Asst. professor in Hindi
Mahatma Gandhi College
Kesavadasapuram
Thiruvananthapuram
Phone: 9447890083

MAHATMA GANDHI COLLEGE
THIRUVANANTHAPURAM

POST GRADUATE AND RESEARCH DEPARTMENT OF HINDI

ADD ON COURSE (BASICS OF ORGANIC FARMING)

Examination Mark List

(Maximum Marks:100)

Sl. No	Name	Candidate Code	Mark	Signature
1.	Abhijith. S.	52522118001	84	
2.	Abhiram. V. Nair	52522118002	94	
3.	Ahalya. S. S	52522118004	92	
4.	Aiswarya. R.	52522118005	90	
5.	Akshaya. S. R	52522118006	92	
6.	Amritha Krishna. P. S	52522118007	92	
7.	Anjana. A. R	52522118008	90	
8.	Anjana. S. A	52522118009	92	
9.	Aparna. A. P	52522118010	94	
10.	Archana Anil	52522118011	94	
11.	Athira. A. Nair	52522118012	90	
12.	Greeshma. K. G	52522118013	92	
13.	Jeena Jayan	52522118014	86	
14.	Jyothika. S.	52522118015	94	
15.	Karthik. M.	52522118016	92	
16.	Lal. S.	52522118017	84	
17.	Lekshmi. L. S	52522118018	92	

Head of the Department
P.G. & Research Dept. of Hindi
Mahatma Gandhi College
Thiruvananthapuram

Course Co-Ordinator

Dr. R. Rajesh Kumar
Asst.professor in Hindi
MahatmaGandhi College
Kesavadasapuram
Thiruvananthapuram
Phone: 9447890053

Principal
Mahatma Gandhi College
Thiruvananthapuram

REPORT

The Programme gave Students a Platform to Understand the Basic Information of Organic Farming. This Programme provides the stake holders the basic principles of Organic farming such as health, ecology, fairness and care and make aware them about the over use of chemicals and pesticides and their future side effects on healthy surviving.

Head of the Department

P.G. & Research Dept. of Hindi
Mahatma Gandhi College
Thiruvananthapuram

Course Co-Ordinator

Dr.R. Rejesh Kumar
Asst.professor in Hindi
Mahatma Gandhi College
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Principal
Mahatma Gandhi College
Thiruvananthapuram

POST GRADUATE AND RESEARCH DEPARTMENT OF HINDI
MAHATMA GANDHI COLLEGE THIRUVANANTHAPURAM

ADD ON COURSE SYLLABUS - 2022-23

HN 01: BASICS OF ORGANINC FARMING   **Total Hours: 30**

Introduction

Organic farming is an agricultural approach that advocates healthy products free from components that may harm humans and nature. The basic idea of organic agriculture is to provide food with optimum nutritional value and minimum dangerous ingredients, with only permitted substances used. The principle also require 100% natural forage for livestock and its future.

Course Outcome (CO)

This Course **BASICS OF ORGANINC FARMING** aims to make an understanding about the importance and benefits of Organic farming such as Environment friendly, Promotes sustainable development, Healthy and tasty food, Inexpensive process, Generate income, and source of employment.

Programme Outcome (PO)

This Programme provides the stakeholders the basic principles of Organic farming such as health, ecology, fairness and care and make aware them about the over use of chemicals and pesticides and their future side effects on healthy surviving.

Programme Specific Outcome (PSO)

1. To introduce the basic principles of organic farming
2. To avoid dangerous chemicals and leaving poisonous residues that have a negative impact on multiple levels, affecting microscopic soil organisms, crops, animals, and humans.
3. To utilize environment friendly techniques in agriculture sector.

Module I: Principles of Organic Farming

Organic farming – different farming techniques – Conventional seeds, GM seeds and organic seeds – grow bag cultivation – Terrace cultivation

Module II: Organic fertilizers and Organic Pesticides

Organic compost – Cattle manures – Poultry droppings –domestic sewage –Vermicomposting Organic Fertilizers – Carbon based Compounds – Cow urine – Tobacco spry – Neem oil - insect traps etc. - Advantages and disadvantages of Organic fertilizers -

Module III: Advantages of Organic farming

Sustainability - self-sufficiency – Farmer individuality - food security and food safety Local marketing

Assignment: *Organic farming and food safety*

References;

Head of the Department
P.G. & Research Dept. of Hindi
Mahatma Gandhi College
Thiruvananthapuram

Principal
Mahatma Gandhi College
Thiruvananthapuram

Course Co-Ordinator
Dr. R. Rajesh Kumar
Asst.professor in Hindi
MahatmaGandhi College
Kesavadasapuram
Thiruvananthapuram
Phone: 9447899053

MAHATHMA GANDHI COLLEGE, THIRUVANANTHAPURAM

POST GRADUATE AND RESEARCH DEPARTMENT OF HINDI

ADD-ON COURSE: BASICS OF ORGANIC FARMING

ASSESSMENT PROCEDURE

The exam procedure is as follows: Maximum Marks:100

1.Theory Examination (50 marks-2 hrs.)

2.Field Visit and Field Work (50 marks)

Students those who secure 60% marks and above will be considered as passed and eligible for the certificate.

Head of the Department

P.G. & Research Dept. of Hindi
Mahatma Gandhi College
Thiruvananthapuram

Course Co-Ordinator

Dr. R. Rajesh Kumar
Asst.professor in Hindi
Mehatma Gandhi College
Kesavadasapuram
Thiruvananthapuram
Phone: 9447890063

Principal
Mahatma Gandhi College
Thiruvananthapuram

LATEX Programming

Department of Mathematics

2022 – 23

Notice

Mahatma Gandhi College ,Thiruvananthapuram

Department of Mathematics

Starting an Add-on Course on

LaTex Programming

for the academic Year 2022-23

Interested students can join the Program

Contact —Dr K Radhakrishnan (9447018612)

Ramkumar R
HoD, Mathematics

Principal
Mahatma Gandhi College
Thiruvananthapuram

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Add-on Course on LATEX Programming
(Course Code : MGMM01, Program Code : AD03)

Aim of the Course : To make awareness of LATEX documentation program toPG students of various Science department of the college.

CO-1: To understand the operating systems UNIX and LINUX
CO-2: To understand about typesetting using LaTex
CO-3: To create mathematics articles.

Duration of the Course : 30 Hours

Total Intake : 15 Students

Mode of Selection : On merit basis (from the applicants)

Syllabus

Module 1
Introduction to UNIX Commands

Introduction to Linux Operating System, Basic UNIX commands — login, directory structure and commands, different file related commands, different file editors, related commands etc.

Module 2
Introduction to LATEX

Computer typesetting using LATEX,running LATEX, different fonts, alignments, setting tabs, underline, setting margins, different documentclasses, special symbols, footnotes, drawing tables, multi columns, multi rows, drawing lines, itemizing, enumerating

Module 3
Mathematical Symbols

Creating mathematical articles, different mathematical symbols and notations, fractions, matrices, arrays, equations, Greek symbols, defining commands, theorems.

Ramkumar R
HoD Mathematics

Principal
Mahatma Gandhi College
Thiruvananthapuram

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Add-on Course on LATEX Programming
(2022-23)

List of Participants

Sl No.	Name	Class	Phone No	E-mail Address
1	Fathima B S	MSc Physics I Year	9496656388	fathimsumaya@gmail.com
2	Aparna RG	MSc Physics I Year	7994260527	aparnarg2001@gmail.com
3	Gopika G Nair	MSc Physics I Year	7356386121	gopikagnairgopikagnair192@gmail.com
4	Raveena RS	MSc Physics I Year	9207238971	raveenaravu666@gmail.com
5	Surabhi Suresh	MSc Physics I Year	9526209537	surabhineyyar@gmail.com
6	Sangeetha Krishna	MSc Physics I Year	9633283216	krishnasangeetha8@gmail.com
7	JENIFA JB	MSc Physics I Year	8136869354	jenifajb1106@gmail.com
8	SUJINA S	MSc Physics I Year	9567801518	sujinasulaiman0610@gmail.com
9	Abhiramkrishnan R	MSc Physics I Year	9633041197	Abhiramkrishnan1191@gmail.com
10	Lekshmi S	MSc Physics I Year	7012506633	lekshmimohanlechu6@gmail.com
11	Anupama J	MSc Physics I Year	7306195091	anupamajk2001@gmail.com
12	Aiswarya Gopan.S	MSc Physics I Year	9074217746	saiswaryagopan@gmail.com
13	Harikrishnan GS	MSc Physics I Year	9746361916	khari2267@gmail.com

14. Gopika Gopan   MSc Physics I Year

Signature of HOD

Ram kumar R

Signature of Course Coordinator

Principal
Mahatma Gandhi College
Thiruvananthapuram

Mahatma Gandhi College

Department of Mathematics

Add on Course on Latex Programming (2022-23)
Examination, August, 2022

Time: 3 Hours

Max. Marks : 25

Answer all the questions
Each question carries 5 marks

1. Write a latex file to obtain the following output:

ABC College, Thiruvananthapuram
Sixth Semester BSc. Examination, February, 2021

Theory of Equations and Vector Analysis

Time : 1 hours

Total Weights : 10

1. One root of $x^3 - 7x^2 + 17x - 11 = 0$ is $3 - \sqrt{-2}$. Find other roots.

2. If $\alpha_1, \alpha_2, \ldots \alpha_n$ are the roots of the equation $a_0 x^n + a_1 x^{n-1} + \cdots + a_{n-1}x + a_n = 0$, find the value of $\alpha_1 + \alpha_2 + \cdots + \alpha_n$.

3. If α, β and γ are the roots of the equation $x^3 + px^2 + qx + r = 0$, form the equation whose roots are $\alpha - \frac{1}{\beta\gamma}$, $\beta - \frac{1}{\gamma\alpha}$ and $\gamma - \frac{1}{\alpha\beta}$.

4. Verify Green's theorem in the plane for

$$\int_C (xy\, dx + x^2\, dy)$$

where C is the curve enclosing the region bounded by the parabola $y = x^2$ and the line $y = x$.

5. (a) State Stoke's theorem.

   (b) State Descarate's rule of sign.

II. Write a latex file to obtain the following output:

The following table gives the perimeter and area of some two dimensional structures.

Sl.No.	Structure	Dimension	Perimeter	Area
1.	Triangle	Sides a, b, c	$a + b + c$	$\sqrt{s(s-a)(s-b)(s-c)}$
2.	Rectangle	Sides l, b	$2(l + b)$	lb
3.	Square	Side a	$4a$	a^2
4.	Circle	Radius r	$2\pi r$	πr^2

Remarks:

1. For triangle, $s = \frac{a+b+c}{2}$.

2. For circle, value of $\pi = \frac{22}{7}$.

III. Write a latex file to obtain the following output:

The Fourier integral representation of a function $f(x)$ is defined as

$$f(x) = \frac{1}{\pi} \int_0^\infty (A(s)\cos sx + B(s)\sin sx)\, ds$$

where

$$A(s) = \int_{-\infty}^{\infty} f(x)\cos sx\, dx$$

$$B(s) = \int_{-\infty}^{\infty} f(x)\sin sx\, dx$$

Note that this representation is possible if

1. $f(x)$ is piecewise continuous in every finite integral

2. $f(x)$ has right-hand derivative and left-hand derivative at every point

3. $f(x)$ is absolutely integrable

2

IV. Write a latex file to obtain the following output:

Diameters of different planets are given below:

No.	Planet	Diameter(km)
1	Mercury	4878
2	Venus	12104
3	Earth	12756
4	Mars	6794
5	Jupiter	142984

Based on this data, answer the following questions:

1. Find the average diameter of these planents. Use the formula

$$\bar{x} = \frac{x_1 + x_2 + \cdots + x_n}{n}.$$

2. If $r = \frac{d}{2}$ where r is radius and d is diameter, then find the radius of earth.

V. Write a latex file to obtain the following output:

The system of equations

$$x + y - z = 1$$
$$x - y + z = 1$$
$$x + y + z = 1$$

can be written in matrix form as

$$\begin{bmatrix} 1 & 1 & -1 \\ 1 & -1 & 1 \\ 1 & 1 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \\ z \end{bmatrix} = \begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix}.$$

Note that the system of equations $AX = B$ has

1. solution if and only if rank(A) = rank(AB)

2. unique solution if rank(A) = rank(AB) = n, the number of variables

3. many solutions if rank(A) = rank(AB) < n, the number of variables

Mahatma Gandhi College ,Thiruvananthapuram
Department of Mathematics

Add-on Course on LATEX Programming 2022-23

Assessment

Sl.No.	Name	Marks (Out of 20)
1	Fathima B S	20
2	Aparna R G	19
3	Gopika G Nair	20
4	Raveena R S	20
5	Surabhi Suresh	18
6	Sangeetha Krishna	20
7	Jenifa J B	19
8	Sujina s	20
9	Abhiram Krishnan R	20
10	Lekshmi S	20
11	Anupama J	18
12	Aiswarya Gopan S	20
13	Harikrishnan G S	20
14	Gopika Gopan	20

Signature of HOD

Ram kumar

Signature of Course coordinator

Principal
Mahatma Gandhi College
Thiruvananthapuram

GPS Map Camera
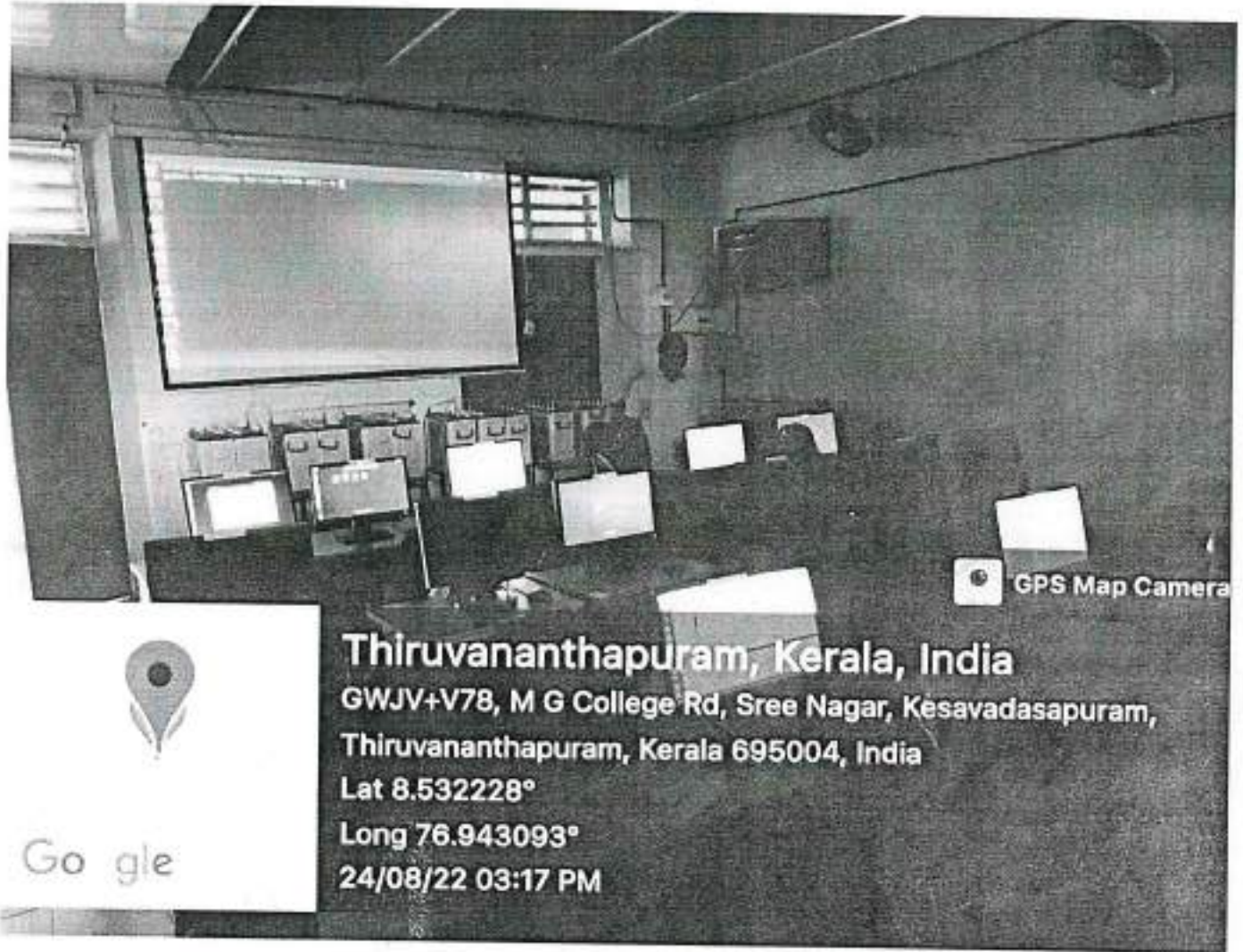
Thiruvananthapuram, Kerala, India
GWJV+V78, M G College Rd, Sree Nagar, Kesavadasapuram,
Thiruvananthapuram, Kerala 695004, India
Lat 8.532228°
Long 76.943093°
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Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Report on Add-on Course on LATEX Programming

2022-23

The Department of Mathematics invited application for the Latex program and 14 students of I year MSc Physics class were selected for the course. The Head of the Department inaugurated the programme on 13-01-2023. 30 hours of classes on LATEX programme were given to the participants. The evaluation and feed back session was conducted on 27-03-2023. The certificates for the participants were issued on 30-03-2023 by the Principal.

Head of the Department

Ram kumar R

Course Coordinator

Principal
Mahatma Gandhi College
Thiruvananthapuram

LINUX Operating System

Department of Mathematics

2022 – 23

Notice

Mahatma Gandhi College ,Thiruvananthapuram

Department of Mathematics

Starting an Add-on Course on

Introduction to LINUX operating System

for the academic Year 2022-23

Interested students can join the Program

Contact —Dr Mahesh T V (9400102180)

Principal
Mahatma Gandhi College
Thiruvananthapuram

Ramkumar R
HoD, mathematics

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Add-on Course on Introduction to Linux Operating System (Course Code : MGMM02, Program Code : UG-01)
2022-23

Aim of the Course : To make awareness of Linux operating system and UNIX commands to UG students of First year BSc Mathematics Students of the college.

Course Outcomes:
CO1:To understand the basics of the operating systems UNIX and LINUX
CO2: To understand the file management using these operating systems
CO3.To understand file permission and ownerships

Duration of the Course : 30 Hours

Total Intake : 35 Students

Mode of Selection : Interested students of I BSc Mathematics Class

Syllabus

Module 1
Introduction to UNIX and LINUX

History and development of Unix and Linux. Comparison of Unix and Linux distributions, Accessing the command line interface (Terminal)
Basic UNIX commands – login, directory structure and commands, different file related commands, different file editors, related commands etc.

Module 2
File Management

Understanding the file system hierarchy, Listing files and directories (ls), Changing directories, Creating, coping, moving and deleting files, Working with text files, text editing with text editors, Searching for texts in files.

Module 3
File Permissions and Ownerships

Understanding UNIX file permissions. Modifying file permissions (chmod, chown), Special permissions. Creating and extracting compressed files. Managing archives with tar.

Ramkumar

Principal
Mahatma Gandhi College
Thiruvananthapuram

Mahatma Gandhi College, Thiruvanathapuram

Department of Mathematics

Add on Course on Linux Operating system

(2022-2023)

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35	Srinidhi A J	B.Sc. Maths IInd Semester	Sreenidhiaj2004@gmail.com	7907696285

Signature of the HOD

Signature of the Co-ordinator

Dr. Mahesh.T-V

Principal
Mahatma Gandhi College
Thiruvananthapuram

Add-On Course on Linux OS

Part-A

Multiple Choice Questions (MCQs) Each carry 1 mark (5 × 1 = 5)

1. Which of the following is not a Linux distribution?

a) Ubuntu
b) Fedora
c) Apache
d) CentOS

2. What is the default shell in most Linux distributions?

a) Bash
b) Zsh
c) Fish
d) Ksh

3. Which command is used to list all files including hidden ones in Linux?

a) ls-h
b) ls-a
c) ls-l
d) ls-R

4. In Linux, what does the command 'chmod 755 file.txt' do?

a) Gives read and write permissions to the owner, and read-only permissions to others.
b) Gives read, write, and execute permissions to the owner, and read-only permissions to others.
c) Gives read, write, and execute permissions to the owner, group, and others
d) Gives read-only permissions to the owner, and read, write, and execute permissions to others.

5. Which command is used to install packages in Debian-based Linux distributions?

a) apt-get
b) yum
c) pacman
d) zypper

Part-B

Short Answer Questions. Each carries 5 marks (3 × 5 = 15)

6. Explain the difference between 'rm' and 'rmdir' commands in Linux.

7. How do you check the disk space usage on a Linux system?.

8. Describe the purpose of the 'grep' command in Linux.

Part-C

(Long Answer Questions. Each carries 10 marks (2 × 10 = 20))

9. Explain the directory structure of a typical Linux system. Include the purpose of commonly found directories.

10. Describe the steps involved in creating a new user account in Linux. Also, explain how to grant sudo privileges to this user.

Principal
Mahatma Gandhi College
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Mahatma Gandhi College, Thiruvanathapuram

Department of Mathematics

Add on Course on Linux Operating system

(2022-2023)

ASSESSMENT

SI no	Name	Mark(out of 30)
1	Anantha Kumar	28
2	Asna Haja s	25
3	Athira M	23
4	Anju S Gopan	22
5	Devanandan A R	25
6	Devika P R	28
7	Ganga V S	24
8	Gopika Gopan	25
9	Jyothika P S	18
10	Jyothikrishna R	20
11	Sneha S S	22
12	Sopika Gopan	26
13	Afrah Fathima N M	24

14	Akash S Mathew	23
15	Akshy A Ashok	25
16	Aparna Ashok	27
17	Vishnu M	25
18	Hariharan S V	20
19	Gopika S Nair	25
20	Akhileshan M	28
21	Vishal V	25
22	Sudheesh S	18
23	Sujith S	19
24	Lethu S	24
25	Rahul R S	25
26	Krishna G R	27
27	Gurumithra S S	24
28	Lekshman Pradeep	20
29	Karthik S S	18
30	Praveen S	16
31	Adithyan H	15
32	Gokul Krishna A	17
33	Vaisnav S J	12
34	Devika R V	18
35	Srinidhi A J	20

Ramkumar R
HOD, Mathematics

Dr. Mahesh T V

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Report on Add-on Course on Introduction to LINUX Operating System

2022-23

The Department of Mathematics conducted an add-on course on Introduction to LINUX Operating System for the first year students of the BSc Mathematics class of this college. The Principal of the College inaugurated the programme on 2-11-2022. 30 hours of classes on LINUX operating system and UNIX commands were given to the participants. The classes were taken by faculty of the Department of Mathematics, MG College, Thiruvananthapuram. The evaluation and feed back session was conducted on 6-02-2023. The certificates for the participants were issued on 13-02-2023 by the Principal.

Head of the Department

Ramkumar R

Course Coordinator

Dr. Mahesh T. V

Principal
Mahatma Gandhi College
Thiruvananthapuram

Doing mathematics with SageMath

Department of Mathematics

2022 – 23

Notice

Mahatma Gandhi College ,Thiruvananthapuram

Department of Mathematics

Starting an Add-on Course on

Doing Mathematics with Sage-Math

for the academic Year 2022-23

Interested students can join the Program

Contact – Dr Ullas Chandran S V (8891711284)

Ramkumar R
HoD Mathematics

Principal
Mahatma Gandhi College
Thiruvananthapuram

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Add-on course: Doing Mathematics with SageMath

Course code: MGMM03
Course outcomes: - students will be able

CO-1: To apply essential programming tools which are required for advanced mathematics.

CO-2: To understand about programming: conditionals and iterative loops, creating their own commands.

Starting SageMath using a browser, how to use the sage cell server https://sagecell.sagemath.org/, how to use SageMathCloud, creating and saving a sage worksheet, saving the worksheet to an .sws file, moving it and re-opening it in another computer system: Using sagemath as a calculator, basic functions [square root, logarithm, numeric value, exponential, trigonometric, conversion between degrees and radians, etc.];

Plotting : simple plots of known functions, controlling range of plots, controlling axes, labels, gridlines, drawing multiple plots on a single picture, adding plots, polar plotting, plotting implicit functions, contour plots, level sets, parametric 2D plotting, vector fields plotting, gradients:

Matrix Algebra : Adding, multiplying two matrices, row reduced echelon forms to solve linear system of equations, finding inverses of square matrices, determinants, exponentiation of matrices, computing the kernel of a matrix:

Defining own functions and using it, composing functions, multi variate functions;

Polynomials : Defining polynomials, operations on them like multiplication and division, expanding a product, factorizing a polynomial, finding gcd:

Solving single variable equations, declaring multiple variables, solving multi variable equations, solving system of non linear equations, finding the numerical value of roots of equations: complex number arithmetic, finding complex roots of equations. Finding derivatives of functions, higher order derivatives, integrating functions, definite and indefinite integrals, numerical integration, partial fractions and integration.

References

1. The SageMathCloud, https://cloud.sagemath.com;

2. Gregory V. Bard. Sage for Undergraduates. American Mathematical Society, available online at http://www.gregorybard.com/Sage.html

Ramkumar.R

Principal
Mahatma Gandhi College
Thiruvananthapuram

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics
Add on Course on SageMath programming
(2022-23)

List of Participates

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Signature of the HOD

Principal
Mahatma Gandhi College
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Signature of the Co-coordinator

Dr. ULLAS CHANDRAN S.V.
Assistant Professor
Department of Mathematics
Mahatma Gandhi College
Thiruvananthapuram-695004

Mahatma Gandhi College, Thiruvananthapuram

Department of Mathematics

SageMath Practical Examination

Instructions

- This is a practical examination. You are required to use SageMath to answer the following questions.

- Save your SageMath worksheet frequently.

- At the end of the examination, save your work as a PDF and submit it according to the instructions provided.

Questions

1. **Basic Calculations**

   (a) Compute the derivative of the function $f(x) = x^3 + 2x^2 - 5x + 7$.

   (b) Evaluate the definite integral $\int_0^1 (3x^2 + 2x + 1)\,dx$.

2. **Linear Algebra**

   (a) Define the matrix $A = \begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{pmatrix}$ in SageMath.

   (b) Compute the determinant and the inverse of the matrix A (if it exists).

   (c) Find the eigenvalues and eigenvectors of A.

3. **Plotting**

   (a) Plot the function $f(x) = \sin(x)$ for x in the interval $[-2\pi, 2\pi]$.

   (b) Plot the parametric curve given by $x(t) = \cos(t)$, $y(t) = \sin(t)$ for t in the interval $[0, 2\pi]$.

4. **Solving Equations**

   (a) Solve the equation $x^3 - 3x + 1 = 0$ for x.

   (b) Solve the system of equations:

   $$\begin{cases} x + y + z = 6 \\ 2x - y + 3z = 14 \\ -x + 4y - z = -2 \end{cases}$$

1

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics
Add on Course on SageMath programming
(2022-23)

Marks of the participants in the Examination

S. No.	Name	Marks (out of 25)
1	Sreelakshmi B J	22
2	Akhila B	18
3	Sivarenjana R S	23
4	Anoop.S	Absent
5	Gopikrishnan	24
6	Anjali Krishna. K. M	17
7	Mithun G M	24
8	Rohith	Absent
9	B. S. Adidev	22
10	Ananthakrishnan. A	21
11	Megha manoj R	16
12	Meenu P S	18
13	Aswathy Krishnan	23
14	Vyshnavi V S	21
15	Kavya.j	18
16	Sreelal	14
17	Abhinav S	18

Signature of the HOD

Ramkumar

Signature of the Co-coordinator

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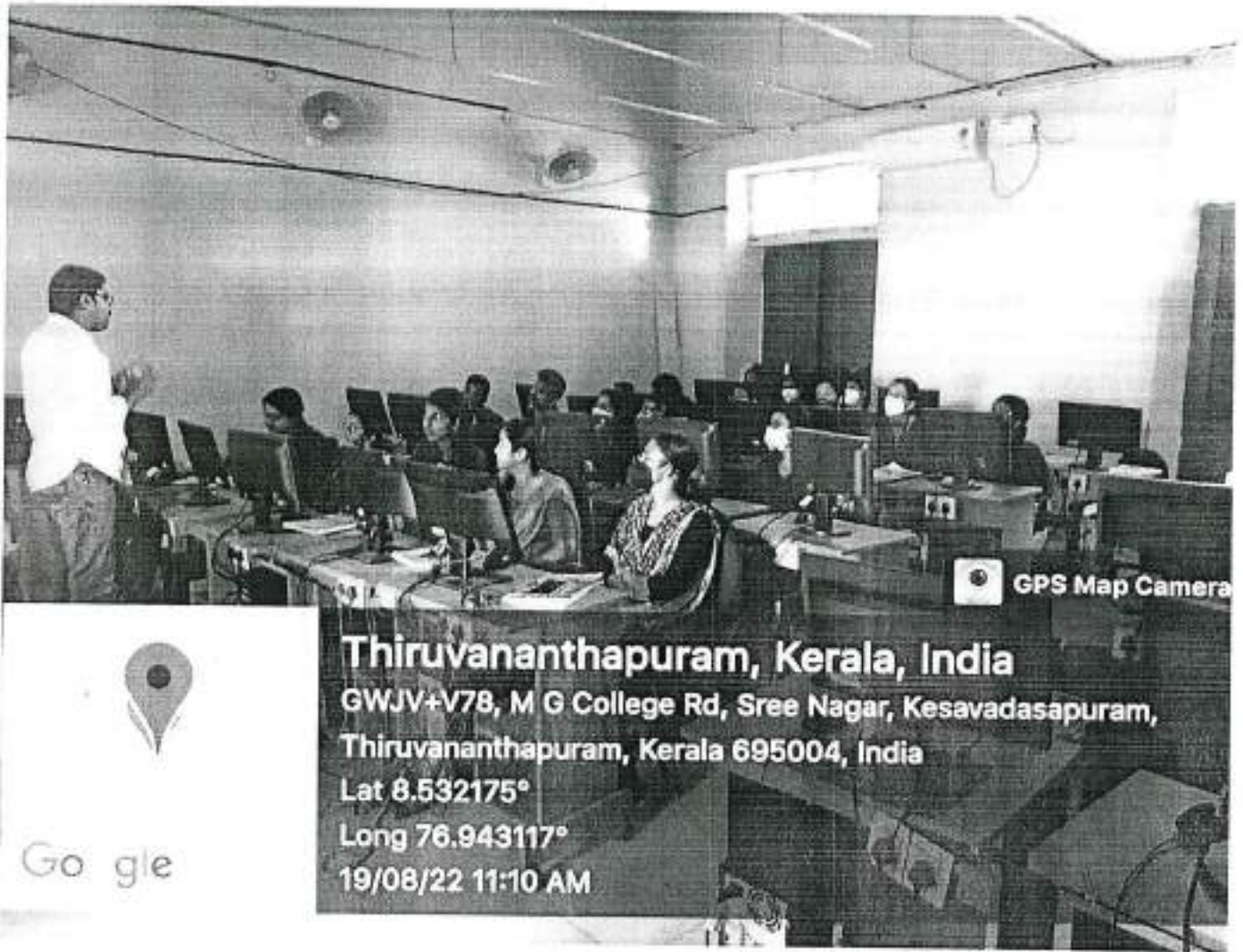
Thiruvananthapuram, Kerala, India
GWJV+V78, M G College Rd, Sree Nagar, Kesavadasapuram,
Thiruvananthapuram, Kerala 695004, India
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Long 76.943117°
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Google

Mahatma Gandhi College, Thiruvananthapuram
Department of Mathematics

Report on Add-on : Doing Mathematics with SageMath

2022-23

The Mathematics Department extended an invitation for applications to the SageMath programming course, resulting in the selection of 17 second-year BSc Chemistry students. The program was inaugurated on June 27, 2022, by the College's Principal. Over the course of the program, participants received a total of 30 hours of instruction on SageMath, facilitated by Dr. Ullas Chandran S. V., an Assistant Professor in the Mathematics Department. An evaluation and feedback session took place on October 11, 2022, followed by the issuance of certificates to participants by the Principal on the same date.

Head of the Department

Course Coordinator

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Principal
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Thiruvananthapuram

Fundamentals of Materials Science

Department of Physics

2022 – 23

Mahatma Gandhi College
Department of Physics
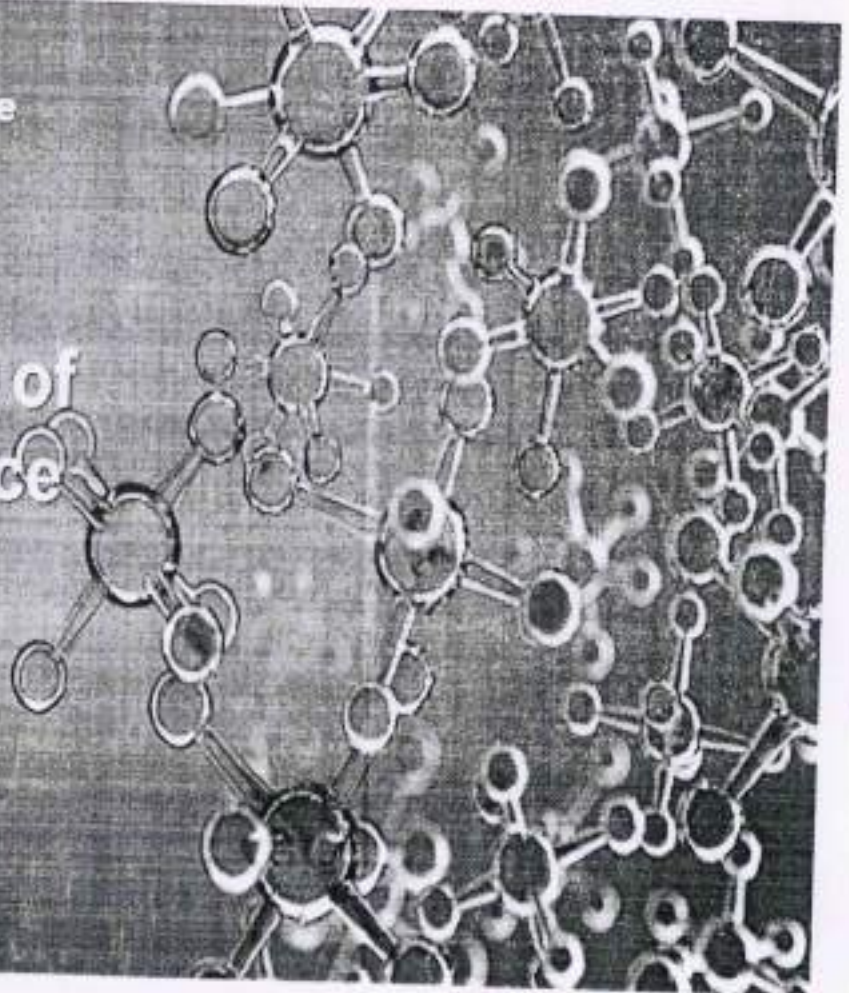
on course

Fundamentals of
Material Science

Enrollment List Of students 2022 – 23 : Fundamentals Of Material Science

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3	23021118003	ABHINAV H B
4	23021118004	ADARSH M.S
5	23021118005	AKHIL PRADEEP P B
6	23021118006	AMAL KISHORE P
7	23021118007	AMBADI SURESH S S
8	23021118008	ANAND S
9	23021118009	ARCHA M.S
10	23021118010	ARYA R L
11	23021118011	ASWIN A S
12	23021118012	AVANTHIKA RAJESH
13	23021118013	BHAGATH A .R
14	23021118014	GADHA M LEKSHMY
15	23021118015	GOURI. R
16	23021118016	JISHA. L
17	23021118017	KANCHANAKRISHNA N
18	23021118018	MEENAKSHI A M
19	23021118019	PARTHAN.A.S
20	23021118020	PARVATHY PRATHAP
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22	23021118022	SAJIN R
23	23021118023	SIDHARTH J
24	23021118024	SNEHA A
25	23021118025	SREELEKSHMI B
26	23021118026	A ASWAL
27	23021118027	ABHINAV.V.S
28	23021118028	ABIN .A.S.
29	23021118029	ADITHYA RAJU
30	23021118030	AKASH S K
31	23021118031	AKSHAY JOSHUA
32	23021118035	ARJUN DEV. G
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34	23021118037	ASWIN S M
35	23021118038	GAUTHAM S NAIR
36	23021118039	GOKUL B S
37	23021118040	GOPIKA L

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40	23021118043	MEGHNA PRAMOD
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45	23021118048	VISHNU B A
46	23021118049	ATHUL VIJAY V S
47	23021118050	BEENA.P
48	23021118051	MEKHA .U
49	23021118052	RIJU. B.
50	23021118053	SAJITH.S
51	23021118054	VISHNU S
52	23022118001	ABHAI SHAJ S
53	23022118002	ABHIJITH K
54	23022118003	ABHINAV KRISHNA K
55	23022118004	ADARSH A M
56	23022118005	ADITHYAN A
57	23022118008	AKSHAY K
58	23022118009	ANMI ANIL
59	23022118010	APARNA R
60	23022118011	ARJUN K RAMESH
61	23022118012	ARYA A D
62	23022118013	ASWIN S NAIR
63	23022118014	AVANEESH V M
64	23022118015	DEVIKA B S
65	23022118016	DEVIKA S NAIR
66	23022118017	GAYATHRI S V
67	23022118018	GOURI KRISHNA D S
68	23022118019	GOWREESH S NAIR
69	23022118020	MEENU B
70	23022118021	NANDANA S S
71	23022118022	RAMPRAKASH P L
72	23022118023	SURYA S
73	23022118024	VISHNU S
74	23022118025	ABHIJITH S
75	23022118026	ABJIJITH B S
76	23022118027	ABHIJITH S A
77	23022118028	ABHMANYU S
78	23022118029	ABHINAND A S
79	23022118030	ABHISHEK S DEV
80	23022118031	ADITHYA V R

81	23022118032	AJIN B
82	23022118034	APARNA KRISHNAN
83	23022118035	ARATHY P J
84	23022118036	ARATHY S V
85	23022118037	ARCHANA S
86	23022118041	ATHULYA J A
87	23022118042	BHAVYA R V
88	23022118043	GANGA S
89	23022118044	JITHIN R
90	23022118045	JYOTHIS BABU
91	23022118046	KIRAN A J
92	23022118047	MALAVIKA B S
93	23022118048	MANUKRISHNA M
94	23022118049	NAKUL M
95	23022118050	PAVITHRA A S

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

"Fundamentals of Material Science"

Syllabus   *Course duration 30 hours*

Unit 1

Structure of materials, Crystal structure of materials, Application of diffusion insintering, Metals and alloys, Metal alloy processing and classification, ceramic structure, properties, and processing , Polymers and composites, polymer processing and applications; corrosion degradation mechanisms, electrochemical reactions, and protection methods.

Unit 2

Electrical properties of metals, semiconductors, and dielectrics; thermal properties of metals and non-metals; magnetic material fundamentals, propertiesand applications; optical material fundamentals, properties and applications. Composite material principles.

Unit 3

Advanced tools and materials, Mechanical properties of solids. Introduction todislocations, grain boundaries, surfaces and multiphase microstructures. Optical and electron microscopic characterization of microstructures.

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Thiruvananthapuram

Test paper

1. In terms of which of the following properties, metals are better than ceramics?
   a) Hardness
   b) Ductility
   c) Toughness
   d) Yield Strength

2. Ceramics make excellent refractory materials. A material is said to be refractory if it:
   a) resists the flow of electric current
   b) has high refractive index
   c) retains its strength at high temperatures
   d) all of the mentioned

3. Packing efficiency of a crystal structure is the ratio of:
   a) Volume occupied by particles to the total volume of the unit cell
   b) Volume occupied by particles to that by voids
   c) Total volume of the unit cell to the volume occupied by particles
   d) Volume occupied by voids to that by particles

4. An octahedral void is surrounded by:
   a) 8 atoms
   b) 18 atoms
   c) 6 atoms
   d) 16 atoms

5. X-rays have larger wavelengths than which of the following?
   a) Gamma rays
   b) Beta rays
   c) Microwave
   d) Visible light

6. Minimum interplanar spacing required for Bragg's diffraction is:
   a) $\lambda/4$
   b) $\lambda/2$
   c) λ
   d) 2λ

7. Frenkel defect belongs to which of the following classes?
   a) Point defect
   b) Linear dislocation
   c) Interfacial defect
   d) Bulk defect

8. Ferromagnetic material shows strong para-magnetic behaviour due to the formation of domains. These domains belong to:
   a) Point defects
   b) Linear defects
   c) Interfacial defects
   d) Bulk defects

9. What is the unit for stress?
   a) N/m^2
   b) Nm^2
   c) N/m
   d) Nm

10. Which of the following relation is stated by Hooke's law?
    a) Stress is directly proportional to strain
    b) Stress is inversely proportional to strain
    c) Stress is directly proportional to square of strain
    d) Stress is inversely proportional to square of strain

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

Test paper Marks

SI No:	Candidate Code	Name of the Candidate	20	
1	23021118001	AARDRA N A	18	
2	23021118002	ABHAY A.S	17	
3	23021118003	ABHINAV H B	17	
4	23021118004	ADARSH M.S	16	
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8	23021118008	ANAND S	18	
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15	23021118015	GOURI R	18	
16	23021118016	JISHA. L	16	
17	23021118017	KANCHANAKRISHNAN	14	
18	23021118018	MEENAKSHI A M	17	
19	23021118019	PARTHAN.A.S	17	
20	23021118020	PARVATHY PRATHAP	18	
21	23021118021	REMYA CHANDRAN R	19	
22	23021118022	SAJIN R	18	
23	23021118023	SIDHARTH J	17	
24	23021118024	SNEHA A	17	
25	23021118025	SREELEKSHMI B	18	
26	23021118026	A ASWAL	15	
27	23021118027	ABHINAV.V.S	19	
28	23021118028	ABIN .A.S.	20	
29	23021118029	ADITHYA RAJU	20	
30	23021118030	AKASH S K	18	
31	23021118031	AKSHAY JOSHUA	15	
32	23021118035	ARJUN DEV. G	16	
33	23021118036	ASWIN DAS S G	18	
34	23021118037	ASWIN S M	16	
35	23021118038	GAUTHAM S NAIR	18	
36	23021118039	GOKUL B S	17	
37	23021118040	GOPIKA L	17	

38	23021118041	KARTHIKA .B.A	18	
39	23021118042	KRISHNAJA. M	19	
40	23021118043	MEGHNA PRAMOD	19	
41	23021118044	NIVEDA N V	18	
42	23021118045	SNEHA S	17	
43	23021118046	SRAVAN S P	17	
44	23021118047	SRUTHI .S	18	
45	23021118048	VISHNU B A	16	
46	23021118049	ATHUL VIJAY V S	16	
47	23021118050	BEENA.P	19	
48	23021118051	MEKHA .U	19	
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50	23021118053	SAJITH.S	20	
51	23021118054	VISHNU S	20	
52	23022118001	ABHAI SHAJ S	18	
53	23022118002	ABHIJITH K	19	
54	23022118003	ABHINAV KRISHNA K	17	
55	23022118004	ADARSH A M	16	
56	23022118005	ADITHYAN A	15	
57	23022118008	AKSHAY K	14	
58	23022118009	ANMI ANIL	15	
59	23022118010	APARNA R	15	
60	23022118011	ARJUN K RAMESH	16	
61	23022118012	ARYA A D	17	
62	23022118013	ASWIN S NAIR	17	
63	23022118014	AVANEESH V M	18	
64	23022118015	DEVIKA B S	18	
65	23022118016	DEVIKA S NAIR	18	
66	23022118017	GAYATHRI S V	18	
67	23022118018	GOURI KRISHNA D S	19	
68	23022118019	GOWREESH S NAIR	19	
69	23022118020	MEENU B	19	
70	23022118021	NANDANA S S	17	
71	23022118022	RAMPRAKASH P L	17	
72	23022118023	SURYA S	16	
73	23022118024	VISHNU S	16	
74	23022118025	ABHIJITH S	18	
75	23022118026	ABJIJITH B S	18	
76	23022118027	ABHIJITH S A	19	
77	23022118028	ABHMANYU S	19	
78	23022118029	ABHINAND A S	18	
79	23022118030	ABHISHEK S DEV	18	
80	23022118031	ADITHYA V R	19	

81	23022118032	AJIN B	19	
82	23022118034	APARNA KRISHNAN	20	
83	23022118035	ARATHY P J	20	
84	23022118036	ARATHY S V	20	
85	23022118037	ARCHANA S	18	
86	23022118041	ATHULYA J A	20	
87	23022118042	BHAVYA R V	19	
88	23022118043	GANGA S	19	
89	23022118044	JITHIN R	17	
90	23022118045	JYOTHIS BABU	20	
91	23022118046	KIRAN A J	20	
92	23022118047	MALAVIKA B S	17	
93	23022118048	MANUKRISHNA M	17	
94	23022118049	NAKUL M	18	
95	23022118050	PAVITHRA A S	19	

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DEPARTMENT OF PHYSICS
MAHATMA GANDHI COLLEGE
THIRUVANANTHAPURAM

Dr. PADMA KUMAR H
Associate Professor
Department of Physics
Mahatma Gandhi College
Thiruvananthapuram-695004

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

Feedback Analysis

Sl No	Candidate Code	Name of the Candidate	Excellent	Very good	Good	Satisfactory	Poor
1	23021118001	AARDRA N A	✓				
2	23021118002	ABHAY A.S	✓				
3	23021118003	ABHINAV H B		✓			
4	23021118004	ADARSH M.S		✓			
5	23021118005	AKHIL PRADEEP P B	✓				
6	23021118006	AMAL KISHORE P		✓			
7	23021118007	AMBADI SURESH S S	✓				
8	23021118008	ANAND S		✓			
9	23021118009	ARCHA M.S	✓				
10	23021118010	ARYA R L		✓			
11	23021118011	ASWIN A S		✓			
12	23021118012	AVANTHIKA RAJESH	✓				
13	23021118013	BHAGATH A .R		✓			
14	23021118014	GADHA M LEKSHMY		✓			
15	23021118015	GOURI. R	✓				
16	23021118016	JISHA. L		✓			
17	23021118017	KANCHANAKRISHNAN		✓			
18	23021118018	MEENAKSHI A M		✓			
19	23021118019	PARTHAN.A.S		✓			
20	23021118020	PARVATHY PRATHAP		✓			
21	23021118021	REMYA CHANDRAN			✓		
22	23021118022	SAJIN R		✓			
23	23021118023	SIDHARTH J	✓				
24	23021118024	SNEHA A	✓				
25	23021118025	SREELEKSHIMI B	✓				
26	23021118026	A ASWAL		✓			
27	23021118027	ABHINAV.V.S		✓			
28	23021118028	ABIN .A.S.		✓			
29	23021118029	ADITHYA RAJU		✓			
30	23021118030	AKASH S K	✓				
31	23021118031	AKSHAY JOSHUA	✓				
32	23021118035	ARJUN DEV. G			✓		
33	23021118036	ASWIN DAS S G			✓		

34	23021118037	ASWIN S M			✓			
35	23021118038	GAUTHAM S NAIR		✓				
36	23021118039	GOKUL B S	✓					
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43	23021118046	SRAVAN S P		✓				
44	23021118047	SRUTHI .S		✓				
45	23021118048	VISHNU B A		✓				
46	23021118049	ATHUL VIJAY V S		✓				
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52	23022118001	ABHAI SHAJ S		✓				
53	23022118002	ABHIJITH K			✓			
54	23022118003	ABHINAV KRISHNA		✓				
55	23022118004	ADARSH A M	✓					

77	23022118028	ABHMANYU S	✓				
78	23022118029	ABHINAND A S				✓	
79	23022118030	ABHISHEK S DEV	✓				
80	23022118031	ADITHYA V R	✓				
81	23022118032	AJIN B		✓			
82	23022118034	APARNA KRISHNAN		✓			
83	23022118035	ARATHY P J		✓			
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86	23022118041	ATHULYA J A	✓				
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88	23022118043	GANGA S			✓		
89	23022118044	JITHIN R		✓			
90	23022118045	JYOTHIS BABU	✓				
91	23022118046	KIRAN A J			✓		
92	23022118047	MALAVIKA B S			✓		
93	23022118048	MANUKRISHNA M		✓			
94	23022118049	NAKUL M	✓				
95	23022118050	PAVITHRA A S	✓				

DEPARTMENT OF PHYSICS
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CERTIFICATE

It is certified that Mr./Ms Jithin R has participated
in the Add-on course **Fundamentals of Materials Science** conducted by this department
during 2022-2023

Coordinator

Head of the Department

Principal

PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

Report

The course was conducted for 95 students. Students will get to know the different classes of materials used in engineering applications and would be able to choose the right materials for specific applications. This course gave an idea on the fundamental aspects of materials science which every material scientist is supposed to be familiar with like the basic structure of solids, classification of materials based on the structure and the correlation between the structure and properties. Students were satisfied with the course.

HEAD
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PRINCIPAL
Mahatma Gandhi College
Thiruvananthapuram

Introduction to Astronomy

Department of Physics

2022 – 23

Add on course

Introduction to Astronomy

2022- 23

IntroductiontoAstronomy

Introduction to Astronomy provides a quantitative introduction to the physics of the solar system, stars, the interstellar medium, the galaxy, and the universe, as determined from a variety of astronomical observations and models.

Unit1:IntroductiontoAstronomyand Astrophysics

Astronomy Basics , Exploring Space , Earth Rotation - Sky coordinates - seasons - phases of the Moon -theMoon'sorbit and eclipses,Planetarymotions-Kepler'sLaws - Gravity; Light &Energy–TelescopesOptics - Detectors; Planets: Formation of Solar System - planet types - planet atmospheres - extrasolarplanets; Stars: Measuring stellar - HR diagram - stellar structure (equilibrium, nuclear reactions, energytransport) - stellar evolution; Galaxies: Our Milky Way - Galactic structure - Galactic rotation - Galaxytypes -Galaxyformation;Cosmology:Expansionof the Universe-redshifts -supernovae-the BigBang

- history of the Universe - fate of the Universe., Our Sun , Solar System Overview : The TerrestrialPlanets (Mercury, Venus, Earth, Mars) , Outer, Dwarf and Exoplanets (Jupiter, Saturn, Uranus, Neptune),Plutoids,The Moons , Rocks and Ice Asteroids , Comets ,Meteors , The Stars , Galaxies , The Universe, Early Space Exploration ,Manned Exploration , Historyof Space

Unit2:Structureand evolutionof stars

Introduction, Classification of Stars: The Harvard classification, Hertzsprung –

Russel diagram, Stellarevolution, White dwarfs, Electrons in a white dwarf

star,Chandrasekhar limit, Neutron stars, Black holes,Supernova explosion, Photon

diffusion time, Gravitational potential energy of a star, Internal temperatureofa

star, Internalpressureof a star.

Unit3:Galaxies

Classification of galaxies – contents and dimensions – collision less stellar

dynamics – relaxation time,dynamical friction, violent relaxation – galactic

potential and orbits – spiral density wave and Lindbladresonance – rotation

curves – Tully-Fisher relation – Central Black Holes and fundamental

planerelationship – Mass and Luminosity function – Press Schechter formalism

– Star formation history andchemical evolution – active galaxies and activity

duty cycle – galaxies at high redshift - clusters andgroups– evidence of

darkmatter.

Enrollment List Of students 2022 – 23 : Introduction To Astronomy

SI No:	Candidate Code	Name of the student
1	23521118001	ABHIMANYU H
2	23521118002	ABHINAV V R
3	23521118003	ABHIRAMY B.R
4	23521118004	ANANDHU.A.B
5	23521118005	ANANTHU UNNITHAN
6	23521118006	ANASWARA. P.S
7	23521118007	ANJALI KRISHNA. K. M
8	23521118008	ANUJITH RAM
9	23521118009	ARATHY. S
10	23521118010	ASWATHY V. R
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18	23521118018	RENJITH R S
19	23521118019	SIVANANDA M
20	23521118020	SIVARENJANA R S
21	23521118021	SIYA S NAIR
22	23521118022	SOORAJ S S
23	23521118023	SRAVYA S. S.
24	23521118024	SREELAKSHMI . B . J
25	23521118025	SREELAL. L S
26	23521118026	ABHILASH J
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35	23521118035	B S ADIDEV
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53	23521118053	JAGANNATH S
54	23521118054	VYSHNAVI V S
55	23521118055	GOKUL KUMAR A G
56	22021118001	ADWAITH. J.S
57	22021118002	AKHIL S S
58	22021118003	AKSHAY. A
59	22021118004	AMRUTHENDU M
60	22021118005	ANASWARA.P
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64	22021118009	B AMAL BHASKAR
65	22021118010	GOWTHAM SANKAR S
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71	22021118016	RITHIN P
72	22021118017	SANUSH .S
73	22021118018	SARAN PRASAD V
74	22021118019	SREELEKSHMI S S
75	22021118020	VAISHNAV. I
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77	22021118022	ABHIJITH D
78	22021118023	ADARSH RAGHAVAN
79	22021118024	ADITHYA M R
80	22021118025	AFRAN S
81	22021118026	AMAL KRISHNA M
82	22021118027	AMALA UNNI B S

83	22021118028	AMALU AJAY
84	22021118029	ANAND SHAJI
85	22021118030	ANANTHA KRISHNAN
86	22021118031	ANUPAMA R.NAIR
87	22021118032	ASWANI A L
88	22021118033	DEVI NANDANA .P.S
89	22021118034	DHANUSH J
90	22021118035	GAYATHRY P V
91	22021118036	GOPIKA G
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93	22021118038	HARI MURALI
94	22021118039	JOBITHA MOL J J
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96	22021118042	SANGEETH KRISHNA. S. R
97	22021118043	SANKAR GANESH
98	22021118045	NAVEENA V

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Test paper

1. What is the difference between asteroids and comets?

   1) Asteroids are small rocky planetoids, while comets are formed of

   frozen gases held together by rocky and metallic material

   2) Asteroids are found mostly between the orbits of Jupiter and Mars,

   while comets are found mostly between Venus & Mercury

   3) Comets show a perceptible glowing tail, while asteroids do not

   Which of the statements given above is/are correct?

   (a) 1 and 2 only

   (b) 1 and 3 only

   (c) 3 only

   (d) 1,2 and 3 only

2. Which one of the following planets has largest number of natural

   satellites or moons?

   (a) Jupiter

   (b) Mars

   (c) Saturn

   (d) Venus

3. If the stars are seen to rise perpendicular to the horizon by an observer,

   he is located on the

(a) Equator

(b) Tropic of Cancer

(c) South Pole

(d) North Pole

4. One Astronomical Unit is the average distance between

(a) Earth and the Sun

(b) Earth and the Moon

(c) Jupiter and the Sun

(d) Pluto and the Sun

5. Who speculated that our universe is expanding?

(a) Newton

(b) Edwin Hubble

(c) Galileo

(d) Copernicus

6. Who speculated that our universe is expanding?

(a) Newton

(b) Edwin Hubble

(c) Galileo

(d) Copernicus

7. Who speculated that our universe is expanding?

(a) Newton

(b) Edwin Hubble

(c) Galileo

(d) Copernicus

8. Who speculated that our universe is expanding?

   (a) Newton

   (b) Edwin Hubble

   (c) Galileo

   (d) Copernicus

9. The unit of measuring distances between the stars is known as

   A) Light year

   B) Stellar mile

   C) Cosmic kilometre

   D) Galactic unit

10. On which of the following planets of the solar system does the sun

rise in the

west and set in the east?

   A) Saturn

   B) Mars

   C) Jupiter

   D) Venus

Introduction To Astronomy

Candidate Code	Name of the student	Marks(20)	
23521118001	ABHIMANYU H	20	
23521118002	ABHINAV V R	18	
23521118003	ABHIRAMY B.R	19	
23521118004	ANANDHU.A.B	17	
23521118005	ANANTHU UNNITHAN	18	
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22021118001	ADWAITH. J.S	18	
22021118002	AKHIL S S	15	
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22021118024	ADITHYA M R	19	
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22021118026	AMAL KRISHNA M	17	
22021118027	AMALA UNNI B S	18	
22021118028	AMALU AJAY	19	
22021118029	ANAND SHAJI	16	
22021118030	ANANTHA KRISHNAN	18	
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22021118045	NAVEENA V	20	

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DEPARTMENT OF PHYSICS
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THIRUVANANTHAPURAM

Report

This course was conducted for 98 students.

Uponcompletionofthiscourse, studentsare able todescribetheBigBang,explaintheage andorigin of the Solar System and illustrate differences between Earth and other planets in the SolarSystem, galaxies. Importantly, students gained the scientific basis to summarize conditionsnecessaryfor life andtoassess scientific evidencefor life onother planets. Along with this class, a star watch program was also conducted in the evening. Students will be able to identify bright, naked eye stars and constellations.Students studied about the interrelationships between the Earth, Moon and Sun. Explain Earth's motions in space: rotation and revolution,Acquire knowledge of the Physical universe and its evolution, Define and use fundamental principles and techniques of astronomy and astrophysics, Understand and apply basic physics and computational techniques to solve problems in astrophysics, and interpret the results.Students will be able to examine and critique the expansive and dynamic nature of our Universe, within a historical perspective.Students will be able to explain the evolution of stars as well as of the large scale structure of the Universe.Current understanding and investigation of the basic knowledge about cosmic threats viz., comets, asteroids, meteoroids.

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Dr. PADMA KUMAR H
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Mahatma Gandhi College
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HEAD
DEPARTMENT OF PHYSICS
MAHATMA GANDHI COLLEGE
Thiruvananthapuram

Play and Art Therapy

Department of Psychology

2022 – 23

Mahatma Gandhi College
Department of Psychology

ADD ON COURSE

PLAY AND ART THERAPY

2022 - 23

Course Coordinator
Dr. JAYARAJ. B
Phone: 81299-51960

Class handled by
Dr. Jayaraj. B (MG College)
Sri. Krishna Janardhana
(CCRT senior fellow)

ADD- ON COURSE - PLAY AND ART THERAPY

Duration: 30 hours

Instructors: Dr. B Jayaraj

Department of Psychology

Mahatma Gandhi College, Thiruvanathapuram

Course outcomes

CSO1. Differentiate between the developmental stages of children and understand the importance of play and its impact on children's cognitive, social-emotional, overall mental health, and physical growth.

CSO2. Identify developmentally and theoretically appropriate play therapy toys and materials for the purposes of both assessment and treatment.

CSO3. Identify and differentiate the stages within the play therapy process from intake to termination.

CSO4. Examine and discuss key elements in a play therapy relationship.

CSO5. Utilize the creative process to help people explore self-expression inorder to find new ways to gain personal insight and develop new coping skills through Art therapy.

Module-wise topics:

Module 1 : Introduction to Play therapy **(10 Hours)**

- Defining Play therapy, history of play therapy, basic principles of play therapy.

- major theories of play therapy: child-centered, Prescriptive, Adlerian, Ecosystemic theoretical framework etc.

- Purpose and application goals of play therapy

- Utilization of play: child'self-exploration, self-expression, self-understanding, and personal growth

- Play therapy as a therapeutic intervention for children and families-therapeutic stages and themes

- The Neuroscience behind the importance of Play: basic developmental and neurological implications

- Treatment planning in play therapy - development of treatment goals and assessment of treatment progress

- Applications of Play therapy-applications to various of populations and therapeutic contexts

Module II : Introduction to Art Therapy   **(10 Hours)**

- Define Art therapy

- Understanding the multiple approaches to art therapy;

- Aim and purpose of art therapy;

- Understanding about art as a therapy and art in therapy;

- Application of art therapy;

- Indications and contraindications of art therapy; and

- Advantages of art therapy

Practicum   **(10 Hours)**

- Demonstrate basic play therapy skills (with non-clinical volunteers) including (but not limited to) structuring, tracking, reflection of content and process, returning responsibility, facilitating self-advocacy, and limit setting.

- Art-based assessments- Mandala Assessment Research Instrument, House-Tree-Person

References

Kottman, T. (2011). *Play therapy: Basics and beyond* (2nd ed.). Alexandria, VA: American Counseling.

Mortola, P. (2006). *Windowframes: Learning the art of gestalt play therapy the Oaklander way*. CRC Press.

Oaklander, V. (1988). *Windows to our children: A gestalt therapy approach to children and adolescents*. Gestalt Journal Press.

O'Connor, K. J., & Braverman, L. D. (2009). *Play therapy theory and practice: Comparing theories and techniques*. John Wiley & Sons.

Schaefer, C. E. (1993). *The therapeutic powers of play*. Northvale, NJ: Jason Aronson.

Schaefer, C. E. (2011). *Foundations of play therapy* (2nd ed.). John Wiley & Sons.

Principal
Mahatma Gandhi College
Thiruvananthapuram

ADD ON COURSE
DEPARTMENT OF PSYCHOLOGY
PLAY AND ART THERAPY
2022-2023

MAX MARKS:20

ANSWER THE FOLLOWING

1. What is play therapy and explain its history?
2. What is the child centred theory of play therapy?
3. What is the Alderian theory of play therapy?
4. What is the treatment planning in play therapy?
5. What are the applications of play therapy?
6. What is art therapy?
7. What are the multiple approaches to art therapy?
8. What is the aim and purpose of art therapy?
9. What are the applications of art therapy?
10. What are the advantages of art therapy?

2 x 10=20

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Thiruvananthapuram

Department of Psychology
Add on Course
Play And Art Therapy
2022- 2023

Sl. No.	Name of the Student	Total mark	Mark obtained
1.	George Varghese Karingottu	20	18
2.	Parvathi A S	20	19
3.	Abhirami Manoj	20	18
4.	Sona shibhu	20	17
5.	Jyothika S R	20	16
6.	Roselyn Maria Rufus	20	20
7.	Muhammed Kasim N B	20	20
8.	Nanda Anil	20	18
9.	Asiya A S	20	20
10.	Lopamudra M L	20	15
11.	Aiswarya Vinu vinod	20	18
12.	Gowri Pramod	20	17
13.	Kalyani R Nair	20	16
14.	Rosna A L	20	18
15.	Anamika	20	19
16.	R Rajeshwari	20	19
17.	Anziya M A	20	17
18.	Sneha G Komal	20	18
19.	Jancy James	20	19
20.	Stefi Maria	20	19

Head of the Department

Principal
Mahatma Gandhi College
Thiruvananthapuram

REPORT OF ADD-ON COURSE ON PLAY AND ART THERAPY (2022-23)

ADD-ON COURSE ON PLAY AND ART THERAPY WAS COORDINATED BY DR JAYARAJ B. THE COURSE WAS FOR FORTY HOURS. THIS COURSE IS BASED ON EMOTIONAL CATHARSIS USING TOYS AND OTHER ART MATERIALS. STUDENTS INDULGE IN STRUCTURING, TRACKING AND REFLECTION OF CONTENT. IT FACILITATES SELD ADVOCACY. 20 STUDENTS ENROLLED FOR THE ADD-ON COURSE

VIDEO REPORT OF THE COURSE IS AVAIBALE IN

https://youtu.be/sAokODFW528

Dr Prathibha S Nair

Principal
Mahatma Gandhi College
Thiruvananthapuram

A new ADD ON COURSE on Play and Art Therapy was started in Department of Psychology on 24.2.2023. The first session was handled by Dr Jayaraj B, the course cordinator

Feedback from students

The play therapy session was conducted by Dr. Jayaraj sir as an add-on course from the department of psychology on 24th February 2023.

An insight about the play therapy was given. Sir shared his experience and how he came to this field. He talked about his mentor, who guided him to learning this therapy.

He mentioned how a child's behavior can be influenced by his toys. How they could relate themselves to the dolls. Especially in the case of abused children, it was easier to communicate with them throu

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Add on Course On
Play and Art Therapy 2022-23.

Course Coordinator — Dr. Jayaraj B.

SR.no	Name	class	Signature
1	George Varghese Karingotu	1st DC	Guk
2	Parvathi A S	2st DC	
3	Abhinami Manoj	I st DC	Abhinamy
4	SONA SHIBU	I st DC	
5	Jyothika SR	I st DC	
6	Roselyn Maria Rufus	I st DC	Roslyn
7	Muhammed Kasim NB	I st DC	Kasim
8	Nanda Anil M	1 st DC	
9	Aspya A S	2 st DC	Asya
10	Lopamudra M L	1 st DC	
11	Aiswarya Venu Vinod	I st DC	Aiswarye VV
12	Gowri Pramod	1st DC	Gowri
13	Kalyani P Nair	1st DC	Kalya
14	Resna A L	1 st DC	Romath
15	ANAMIKA	"	
16	R. Rajeswary	1st DC	Rajeswary
17	Anziya M A	1st DC	
18	Sneha G kamal	"	
19	Jancy James	I st DC	Jang
20	Stephy Maria	1 nd R	Stephy

Principal
Mahatma Gandhi College
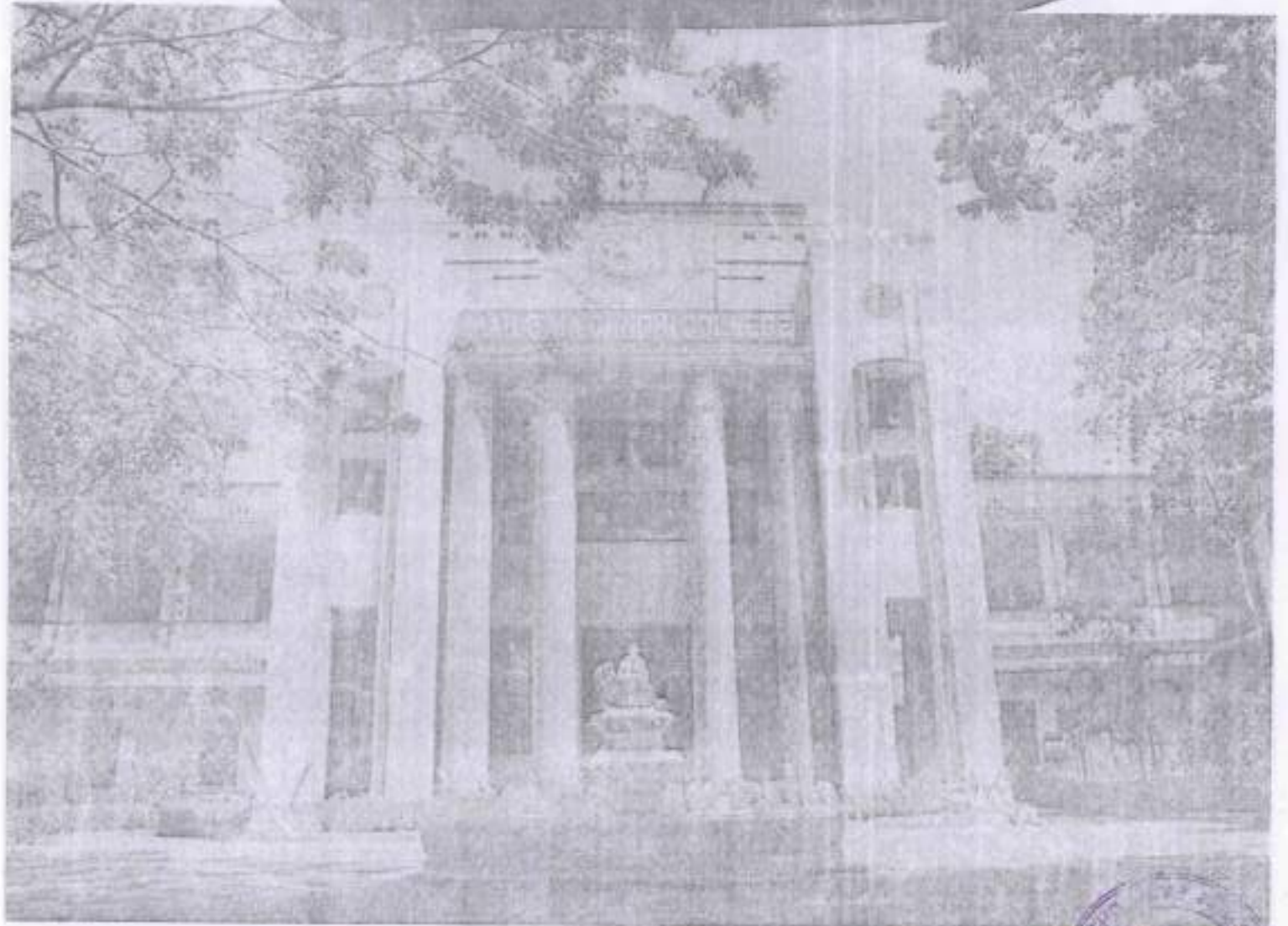Thiruvananthapuram

Self Enhancement and TCI

Department of Psychology

2022 – 23

MAHATMA GANDHI COLLEGE TRIVANDRUM

Department of Psychology

presents

TCI ADD-ON COURSE

16 March, 2023   **9:30 am - 4:30**

Venue: Roomno: 305

ADD-ON COURSE SYLLABUS

COURSE TITLE: SELF ENHANCEMENT USING THEME CENTERED INTERACTION MODEL (TCI)

CS 01: Identify one's strength and weakness and use it for self enhancement.

CS 02: Explore the strength of the group in one's development through JOHARI WINDOW.

CO 03: Identify Life skills and one's skill strength and weakness.

CS 04: Experience Self enhancement in TCI workshop.

Module 1: Self Awareness, Who Am I? How Am I Here (Travel through Life), SWOT Analysis, JOHARI Window, Creativity and its Enhancement (10 hrs).

Module 2: Life skills, Self Growth Readiness to Change, Attitude Change, Balanced Growth- Physical, Emotional, Intellectual, Spiritual (10 hrs).

Module 3: TCI Model Workshop for Self Enhancement (10 hrs).

REFERENCES:

1. WHO handbook for Life skills Education in School.
2. Kuebel M.A (2016). Living Learning- Third Edition:
   Ripples Forum for Creative Interventions.

Web links:

1. Ruth Cohn Institute for TCI International, (n. d). "What is TCI", https://www.ruth-cohn-institute.org/what-is-tci.html .
2. Universitat, Innsbruck.(2019). "Theme Centered Interaction (TCI)". https://www.uibk.ac.at/peacestudies/research/ecm/ecm-as-elective-working-method/theme-centerd-interaction-tci.html.en.

Corse Coordinators

1) PRATHIBHA S NAIR

2) MATIUS VENGAL

PRESIDENT RCI FOR TCI INDIA

Principal
Mahatma Gandhi College
Thiruvananthapuram

ADD ON COURSE
DEPARTMENT OF PSYCHOLOGY
SELF ENHANCEMENT AND TCI
2022-2023

MAX MARKS:20

ANSWER THE FOLLOWING

1. What is self awareness?
2. What is SWOT analysis?
3. What is JOHARI window?
4. Explain creativity and its enhancement
5. What are life skills?
6. Explain self growth readiness to change
7. What is attitude change?
8. What is balanced growth?
9. Explain physical and emotional balanced growth
10. Explain intellectual and spiritual balanced growth

2 x 10=20

Principal
Mahatma Gandhi College
Thiruvananthapuram

Department of Psychology
Add on Course
Self Enhancement TC - I   2022-2023

Sl. No.	Name of the Student	Total mark	Mark obtained
1.	Rahul Kannan C	20	18
2.	Shifana S	20	19
3.	Varsha M S	20	18
4.	Nazeeha F	20	17
5.	Jincy Raj JL	20	16
6.	Aaron P Raj	20	20
7.	Safna Raffee	20	20
8.	Fathima Muamina	20	18
9.	Vaishnavi B	20	20
10.	Aparna A J	20	15
11.	Gopika Rajesh	20	18
12.	Akhila Jayakumar	20	17
13.	Anamika M G	20	16
14.	Arjun A	20	18
15.	Devanandana P Nair	20	19
16.	Sifi Anil	20	19
17.	Lekshmi Hari Nair	20	17
18.	Karthu S Krishna	20	18
19.	Harikrishnan R	20	19
20.	Amalendhu MS	20	19
21.	R Devapriya	20	16
22.	Aiswarya S	20	18
23.	Anena U R	20	17
24.	Kiran k	20	19
25.	Thejusree Jayaprakash	20	20
26.	Niya Mol K	20	17
27.	Meenakshi H R	20	17
28.	Sujin S S	20	18

P. 7. 0

29.	Abhishek S	20	19
30.	Nandana S A	20	17
31.	Saiganga G S	20	19
32.	Gopika J P	20	18
33.	Rebecca R Johnson	20	20

Principal
Mahatma Gandhi College
Thiruvananthapuram

REPORT OF ADD ON COURSE ON SELF ENHANCEMENT AND TCI (2022-23)

A NEW ADD-ON COURSE WAS STARTED THIS YEAR. THEME CENTRED INTERACTION (TCI) IS A HUMANISTIC PSYCHOLOGY. THIS COURSE WAS ALSO CONDUCTED IN ASSOCIATION OF SANJEEVANI BEFRIENDERS WITH WHOM MOU IS SIGNED. CLASSES WERE HANDLED BY SRI MATIUS VENGAL (PRESIDENT, RCI FOR TCI INDIA). 33 STUDENTS ENROLLED FOR THE COURSE. COURSE INCLUDED A TCI MODEL WORKSHOP FOR SELF ENHANCEMENT. COORDINATOR OF THE COURSE WAS DR PRATHIBHA S NAIR, HEAD OF THE DEPARTMENT OF PSYCHOLOGY.

VIDEO REPORT OF THIS COURSE IS AVAILABLE IN

https://youtu.be/gRZQxk78ET8

Kesavadasapuram, Thiruvananthapuram, 695004, KL, India

Latitude	Longitude
8.5315° N	76.9429° E
Local 11:17:31	Altitude 24.5 meters
GMT 05:47:31	Thursday, 03/16/2023

Principal
Mahatma Gandhi College
Thiruvananthapuram

An add on course 'Enhancement of self using TCI' was inaugurated on 27.1.2023 by Principal Dr VM Anandakumar followed by a full day workshop as part of the course. Workshop was led by Sri. Matius Vengal (President RCI for TCI India and Director, Sanjeevani), Dr Rajendra Babu and Dr Prathibha S Nair. The course is for Psychology students

04:10 ✓✓

30 January 2023

ADD ON COURSE - TCI WORKSHOP
www.youtube.com

https://youtu.be/UnUFUdaregM

09:31 ✓✓

↱ Forwarded

Principal
Mahatma Gandhi College
Thiruvananthapuram

Ongoing Ad 16 March 2023 n 'Enhancement of Self using TCI and intercollegiate interaction program

Yet another full day workshop was organised as part of the ongoing TCI workshop. In this session students from SN College Chempazhanthy also participated . First session was on Principles, axioms and postulates of TCI model by Sri Matius Vengal, President RCI for TCI India and Dr Rajendra Babu, Emeritus Scientist. Next was on Personal Transformation, an allegorical session on imaginals and butterflies by Dr Geetha Former Principal, NSS Nemmara. Afternoon sessions included a group discussion on ' Miles to go before I sleep - Decision to Grow and will to change' and Trust walk to lead and be lead with eyes blindfolded. Sessions ended with feedback where students ... Read more

20:21 ✓✓
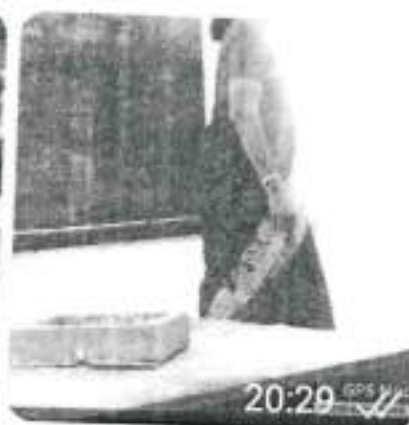
Principal
Mahatma Gandhi College
Thiruvananthapuram

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20:29

20:29

Add-on Course   ∞
SELF ENHANCEMENT - TCI

Class Co-ordinator   Prathibha S Nair   *Pitt*

Classes handled by: Sri Mathew Vengal
                 Dr Rejendra Babu
                 Dr Prathibha S Nair   *Pitt*

Sl.no.	Name	Class	Signature
1.	Rahulkannan·c	IIIrd DC Psychology	
2.	Shifana·S		
3.	Varsha·M·S	3rd DC Psychology	
4.	Nazeeha·F	3rd DC Psychology	Nazeeha
5.	Jimcy Raj·J·L	3rd DC Psychology	JmyRaj
6.	Safna Raffee	3rd DC Psychology	
7.	Aaron P Raj	3rd DC Psychology	
8.	Fathimath Muahena·M	3rd DC psychology	
9.	Vaishnavi·B	3rd DC Psychology	
10.	Aparna AJ	3rd DC psychology	
11	Gopika Rajesh	3rd DC Psychology	
12.	Akhila Jayakumar	3rd DC Psychology	
13	REBECCA R·JOHNSON	3rd DC Psychology	
14	ANAMIKA·M G	3rd DC Psychology	
15	ARJUN A	3rd DC Psychology	
16.	DEVANANDANA·P·NAIR	3rd DC Psychology	DPN
17	LAKSHMI HARI NAIR	3rd DC Psychology	
18.	SIFI ANIL	3rd DC Psychology	
19	KARTHU S KRISHNA	3rd DC Psychology	Karthu
20.	Hrikrishnan·R	3rd DC Psychology	
21	Amalendhu·M·S	3rd DC Psychology	
22	R·Devipriya	3rd DC Psychology	Devi
23	Aiswarya·S	3rd DC Psychology	
24	Oneba·V·R	3rd DC psychology	
45	Kiran·K	3rd DC Psychology	

27.	Niya Mol .K.	
28.	Meenakshi . H.R	
29	Sujin S.S	
20	Abhishek .S	
31.	Navdava. S.A.	
32.	Saigunga.G.S	
32 .	Gopika . J.P	

Principal
Mahatma Gandhi College
Thiruvananthapuram

Transactional Analysis

Department of Psychology

2022 – 23

MAHATMA GANDHI COLLEGE

DEPARTMENT OF PSYCHOLOGY

IN ASSOCIATION WITH

TA COMMUNITY TRIVANDRUM

AND

SANJEEVANI BE FRIENDERS

CONDUCTS

ADD ON COURSE ON TRANSACTIONAL ANALYSIS

2022-23

DEC 7,8

Venue :- **MARIA RANI CENTER PANGAPPARA.**

Follow up class :-
Department of Psychology,
Mahatma Gandhi College.

TRANSACTIONAL ANALYSIS - PEOPLE MANAGEMENT SKILLS WITH

TA Total Hours : 30

Course Outcomes:

CSO1: Students will become familiar with basics of Transactional Analysis

CSO2: Students can identify People Management Skills in schools and workplaces

Module I 10 Hours

Identifying areas of People management in Schools, work

places 360° interpersonal relationship in schools, workplaces

Non Verbal Communication — Body Movement or

Kinesics, Physical characteristics, Vocal quality, Proxemics, Artifacts

and Environrnent . Listening and Responding – Active Listening,

Giving Feedback, Paraphrasing

Module 2 10 Hours

TA introduction, Ego states, Structure model, Contamination and Exclusion, Diagnosis of ego states, Ego grams

Motivation — Structure, Stimulus and Recognition Hunger . Emotional intelligence

P. 9. 0

ADD ON COURSE
DEPARTMENT OF PSYCHOLOGY
TRANSACTIONAL ANALSYSIS
2022-2023

MAX MARKS:20

ANSWER THE FOLLOWING

1. Explain identifying areas of management in workplaces and schools

2. Explain non verbal communication and its components

3. What is transaction and its types and rules?

4. What is strokes and its types and? Also explain what is stroke economy

5. What are life positions?

3 x 5=15

6. What is motivation? Explain its structure

5 x 1=5

Principal
Mahatma Gandhi College
Thiruvananthapuram

Department of Psychology
Add on Course
Transactional Analysis
2022- 2023

Sl. No.	Name of the Student	Total mark	Mark obtained
1.	Anamika MG	20	18
2.	Devanadna P Nair	20	19
3.	Harikrishna R	20	18
4.	Kiran K	20	17
5.	Aryan A	20	16
6.	Amalendhu M S	20	20
7.	Aiswarya S	20	20
8.	Aparna A J	20	18
9.	Rahul Kannan C	20	20
10.	Rebecca R Johnson	20	15
11.	Sifi Anil	20	18
12.	Nandana S A	20	17
13.	Safana Rafer	20	16
14.	Naseeha F	20	18
15.	Shifana S	20	19
16.	Jincy Raj JL	20	19
17.	Devi Rameshan	20	17
18.	Gopika Rajesh	20	18
19.	Akhila Jayakumar	20	19
20.	Karthu S Krishna	20	19
21.	Nanadana Nair CS	20	16
22.	Pramada S P	20	18
23.	Aswathy P	20	17
24.	Stefi Mariya Peter	20	19
25.	Aswani Deva A L	20	20
26.	Aksa Y Rajan	20	17
27.	Gowri R	20	17
28.	Aiswarya Rani	20	18
29.	Ajmiya	20	17
30.	Alveena Mary Biju	20	19
31.	Amna Thajudheen	20	19
32.	Aparna Vijay	20	17
33.	Ardra S Kumar	20	18
34.	Megha G Nair	20	19
35.	Rahii R Nair	20	18
36.	Sneha G Komal	20	19
37.	Anziya M A	20	17
38.	Krishna S Nair	20	18
39.	Gopika C Nair	20	19
40.	Anagha A	20	18
41.	Keerthana P V	20	18

REPORT OF ADD ON COURSE ON TRANSACTIONAL ANALYSIS. (2022-23)

THE SPECIFIC TITLE OF THE COURSE IS 'PEOPLE ENHANCEMENT SKILLS WITH TA'. THE COURSE COMPRISED OF 30 HOURS. 66 STUDENTS HAD ENROLLED FOR THE COURSE. THIS COURSE WAS CONDUCTED IN ASSOCIATION WITH SANJEEVANI BEFRIENDERS WITH WHOM MOU IS SIGNED. TA TRIVANDRUM CHAPTER RUNS IN SANJEEVANI BEFRIENDERS. STUDNETS ALSO ATTENDED CLASSES IN MARIA RANI CENTRE, PANGAPPARA. STUDENTS WERE GIVEN CERTIFICATES FROM ICTA. COORDINATOR OF THE COURSE IS DR PRATHIBHA S NAIR, HEAD OF THE DEPARTMENT OF PSYCHOLOGY, WHO IS A BTA HOLDER

REPORT IS GIVEN IN THE BELOW GIVEN YOUTUBE LINK

https://youtu.be/UnUFUdaregM

GPS Map Camera

Thiruvananthapuram, Kerala, India
HW54+6M2, Gandhipuram Road, Chavadimukku, Amadi Nagar,
Sreekariyam, Thiruvananthapuram, Kerala 695581, India
Lat 8.556841°
Long 76.906105°
07/12/22 02:19 PM GMT +05:30

Google

Principal
Mahatma Gandhi College
Thiruvananthapuram

Dr Prathibha S Nair

Yoga and Humanity
Department of Hindi
2022 – 23

MAHATMA GANDHI COLLEGE, THIRUVANANTHAPURAM

POST GRADUATE AND RESEARCH DEPARTMENT OF HINDI

YOGA FOR HUMANITY – SYLLABUS

(Add-On Course)

ॐ

सह नाववतु
सह नौ भुनक्तु
सह वीर्यं करवावहै
तेजस्विनावधीतमस्तु मा विद्विषावहै
ॐ शान्तिः शान्तिः शान्तिः

Course outcomes: 1. Understand the concept of Yoga.

2. Understand the objectives of Yoga.

3. To understand Yoga and diet.

4. To understand Asanas, Pranayama, Kriyas, Bandhas etc.

PART – ONE, Theory: (15 hrs)

Unit – I

A. Opening Prayer
B. Closing Prayer
C. Surya Namaskar Prayer

Teacher in charge

Unit – II

1. Introduction to Yoga
2. Definition of Yoga
3. The Concept of Yoga
4. Aims and Objectives of Yoga

Unit – III

1. Streams of Yoga:
   a. Karma Yoga
   b. Bhakti Yoga
   c. Jnana Yoga
   d. Raja Yoga
   e. Hatha Yoga
2. Yoga and Diet
3. Yoga Disciplined way of Life

Unit – IV

1. Asana
2. Pranayama
3. Kriya
4. Mudra
5. Bandha
6. Meditation

Course Outcomes: 1. To understand the breathing exercise etc.
2. To understand about the importance of Surya namaskar.
3. To understand Asanas, Pranayama etc.

PART – TWO, Practical: (15 hrs)

Unit – V

1. Breathing Practice:
   a. Hands in and out Breathing
   b. Hands stretch Breathing
   c. Ankle Stretch Breathing

2. Loosening Exercises:
   a. Jogging

Teacher in charge

b. Mukha Dhouti (Cleaning through a Single Blast Breath)
c. Front and back bending of waist
d. Side bending and twisting of waist
e. Twist and breath

Unit – VI

1. Surya Namaskar

Unit – VII

1. Asanas
   a. Vajrasana
   b. Ardha Pavana Mukhtasana/Pavana Mukhtasana
   c. Poorva Bhujangasana
   d. Sulabha Salabhasana
   e. Sulabha Naukasana
   f. Uthita Eka Padasana / Uthita Dwipadasana
   g. Sulabha Makarasana
   h. Sulabha Ardha Dronasana/Sulabha Dronasana
   i. Eka Pada Hasthasana/Pada Hasthasana
   j. Sulabha Chakrasana
   k. Vakrasana
   l. Janu Sirasana

Unit – VIII

1. Pranayama
   a. Swasanamarga Sudhi
   b. Kapalabhati
   c. Nadi Sudhi Pranayama

yogena chittasya padena vacham
malam sharirasya cha vaidyakena
yo 'pakarottam pravaram muninam
patanjalim pranjalir anato 'smi

Teacher in charge

Reference Text Books:

- Asana Pranayama Mudra Bandha By Swami Satyananda Saraswati, Yoga Publications Trust, Munger, Bihar, India.
- Hatha Yoga Pradipika, By Swami Muktibodhananda, Yoga Publications Trust, Munger, Bihar, India.
- Surya Namaskara, A Technique of Solar Vitalization By Swami Satyananda Saraswati, Yoga Publications Trust, Munger, Bihar, India.
- History and Development of Yoga By Directorate of Distance Education, Annamalai University.

Principal
Mahatma Gandhi College
Thiruvananthapuram

Teacher in charge

PG & RESEARCH DEPARTMENT OF HINDI
Mahatma Gandhi College, Thiruvananthapuram

Add-On Course - Yoga for Humanity
SUMMARY REPORT

An Add-On Course "Yoga for Humanity" has started in the PG and Research Department of Hindi, Mahatma Gandhi College, Thiruvananthapuram in the year 2022.

The inauguration of the course has conducted on 24th August 2022. In the beginning 30 students were enrolled and later on the number has increased to 60. During the academic year 2022-2023 several classes were conducted for a duration of 30 Hours. This includes Theory as well as Practical sessions, which were handled by experts in the yoga fields.

There was a very good response for this course from the students as well as from their parents. Those students reported to college after the pandemic situation, it helped a lot to release their emotional as well as mental stress.

There was a special class conducted with the help of Yoga Club, Mahatma Gandhi College, Thiruvananthapuram in Yoga and Mental Health including Meditation Practice. For this program also very good response was received from the participants.

Based on the responses from the students of this Add on Course "Yoga for Humanity" the Department of Hindi has decided to continue this course in the coming years also.

Principal
Mahatma Gandhi College
Thiruvananthapuram

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Assessment of Students

Sl No.	Candidate Code	Name	Marks. (50)
1	12522118008	Amal · H	35
2.	12522118010	Anjana Krishnan S·J	40
3.	12522118022	Devika Udayan ·	38
4.	12522118027	Malavika · S.	30
5.	12522118030	Nandana · L ·	32
6.	12522118031	Nandana·S.	38
7.	12522118032	Nandana Raj·R·S·	32
8.	12522118044	Siva Krishnam A·C.	30
9.	12522118045	Soorya ·S· Nair·	35
10.	12522118050	Vismaya ·S·Nair	30
11.	1252 118027	Gouri M·R·	32
12.	1252 118028	Gouri A·S·	34
13.	1252111 8029	Karthika·S.	36
14.	1252111 8032	Lekshmy Suresh·	42
15.	1252 111 8036	Nileen · R·Nair·	31
16.	1252011 8016	Aravind V·V	44 (High Score).
17.	1252011 8029	Gouri A·S·	33
18.	1252011 8031	Haritha·S·S·	35
19.	1252011 8043	Sneha·S·	36
20.	1252011 8062	Abhijith·P·	32
21	1252011 8037	Preetha·P·	30
22.	12522118003	Abhiram B·N	31
23.	12522118004	Abhishek·R·S	34
24	12522118005	Adithya·7·S.	32
25	12522118006	Ajay·S·	30
26.	12522118007	Amal chandsanJ·B	31
27	12522118009	Aneesh·S·	30
28.	12522118011	Anoop M·S·	31
29	12522118013	Aoathi·S	33
30	12522118014	Aoathy·A·V	36
31.	12522118015	Aswani Dev M	38
32.	12522118016	Aswathy·B·	30
33	12522118019	Athira V·J·L·	30

8.

Assessment of Students

Sl No.	Candidate Code	Name	Marks (50)
34.	12522118020	Athul Nath·B·S	32
35	12522118021	Devika·R	34
36.	12522118022	Devika Udayan	36
37.	12522118025	Hari shankar·S	33
38.	12522118026	Hasna·A·R	34
39.	12522118027	Malavika·S·	31
40.	12522118029	Nandana·C·S·	31
41.	12521118013	Akshay·A·Nair	30
42.	12521118014	Akshaya·P·L	32
43.	12521118025	Aswin·A·	35
44.	12521118048	Vishal·B	36
45.	12521118007	Adarsh·S·V	32
46.	12521118010	Ajmal·N·S	31
47.	12521118024	Aswin·K	30
48.	12521118006	Adarsh Vijay.	32
49.	12521118005	Adarsh·S·	31
50.	12521118001	Abhi krishna·R	35
51	12521118004	Abhirag·A·B	35
52	12521118018	Aouth N·M·A·	34
53	12521118019	Arathi A·R	36
54.	12521118038	Preuitha Prem.	38
55.	12521118039	Rajeev·S	32
56.	12521118041	Saoanya Ray	31
57	12521118040	Revathy Sdreesh·R	30
58.	12521118031	Krishna·R·B	32
59.	12521118047	Sujith·S	38
60	12521118049	Vishnu·V·A·	30

Principal
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